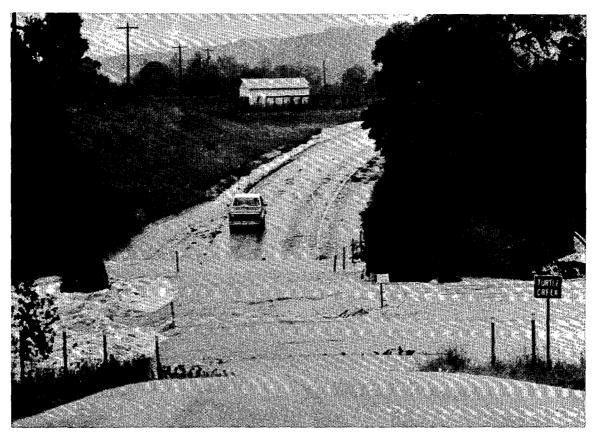
# STORM DATA

### WITH LATE REPORTS/CORRECTIONS





"I CERTIFY THAT THIS IS AN OFFICIAL PUBLICATION OF THE NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION AND IS COMPILED FROM INFORMATION RECEIVED AT THE NATIONAL CLIMATIC DATA CENTER, ASHEVILLE NORTH CAROLINA'

Kennel D Wadean

NATIONAL CLIMATIC DATA CENTER

Support for this publication is provided in part by the Office of Naval Research, Marine Meteorology Program, Dr. Robert F. Abbey, Jr., Director. Extensive data collection efforts are provided by the National Weather Service.

#### CONTENTS

Cover: Only one month after the extensive floods of late May and early June 1987, flash flooding returned to the South Texas Hill Country on July 17th after overnight rains of as much as 11.50 inches. This time, 10 persons drowned when a bus and van carrying 4 adults and 39 teenagers were swept into the Guadalupe River by the floodwaters. Pictured, a pickup stands idle as its driver decides whether or not to cross Turtle Creek, here running 3.5 feet over Texas Highway 16 on July 17th. (See FLASH FLOODING in SOUTH-CENTRAL TEXAS, pages 14 through 16.) --- Photo by Susan M. Sander, The Kerrville Daily Times. Page Outstanding Storms of the Month..... 3 Storm Data and Unusual Weather Phenomena..... 28 Storm Summary..... 90

Late Reports/Corrections.....

Reference Notes and "F" Scale Definitions.....

92

93

# STORM DATA (ISSN 0039-1972)

The section on Outstanding Storms of the Month is prepared by Professor T. Theodore Fujita, editor, and Duane J. Stiegler, associate editor, the University of Chicago, with funding by the U. S. Office of Naval Research. The Storm Data and Unusual Weather Phenomena narratives, and summaries of Hurricanes/Tropical Storms are prepared by the National Weather Service. The National Climatic Data Center compiles statistics on deaths, injuries, damage and prepares the annual summaries of tornadoes and Lightning. This publication contains our best information on storms, but due to the difficulties inherent in collection of this type of data it is not all-inclusive. Late reports and corrections will be carried quarterly. Maps of zones used in the Storm Data and Unusual Weather Phenomena will be published in all editions.

Storm Data is published monthly by the National Climatic Data Center.

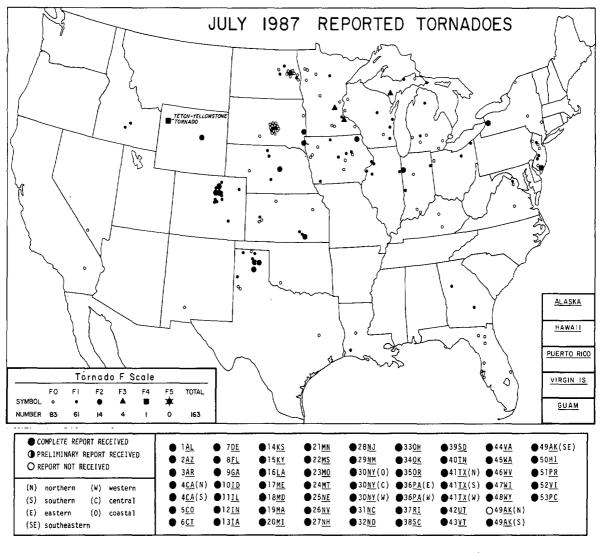
Publication Staff

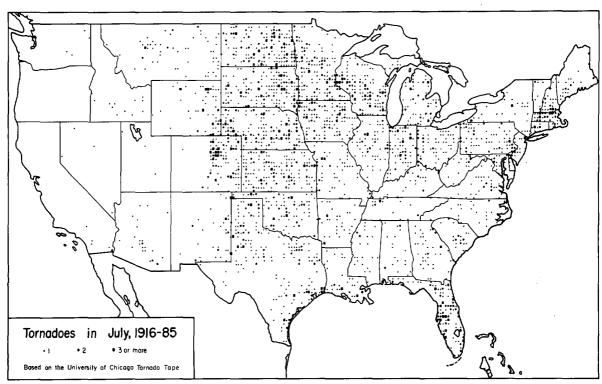
J. D. Ziemianski S. C. Lackey Supervisory Meteorological Technician Editorial Clerk

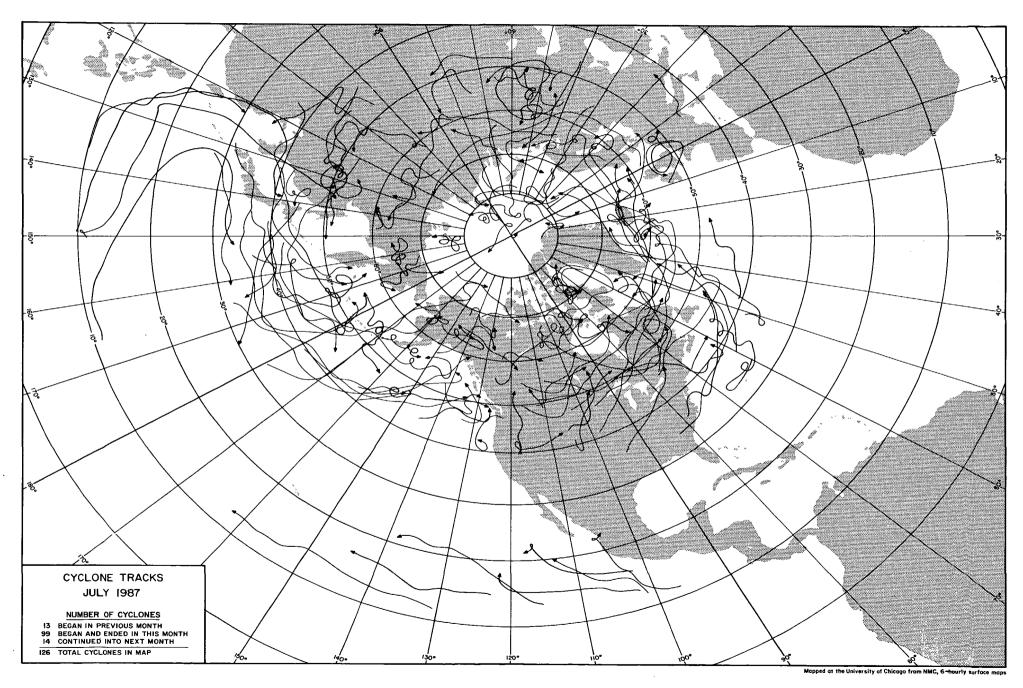
Subscription, pricing, and ordering information is available from:

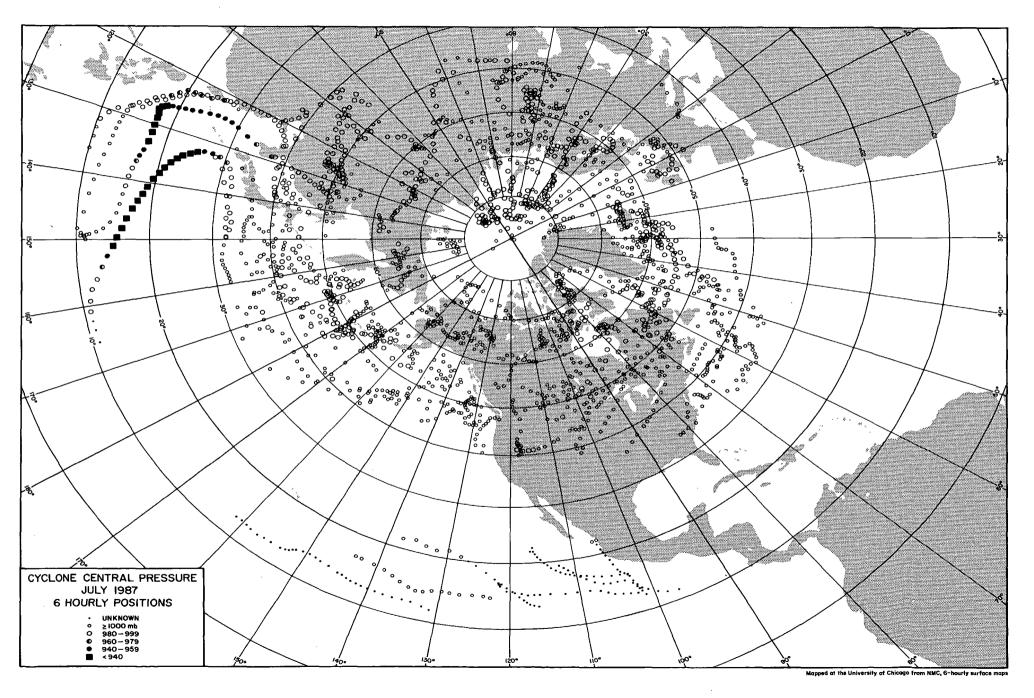
National Climatic Data Center Federal Building Asheville, NC 28801-2696

## OUTSTANDING STORMS OF THE MONTH

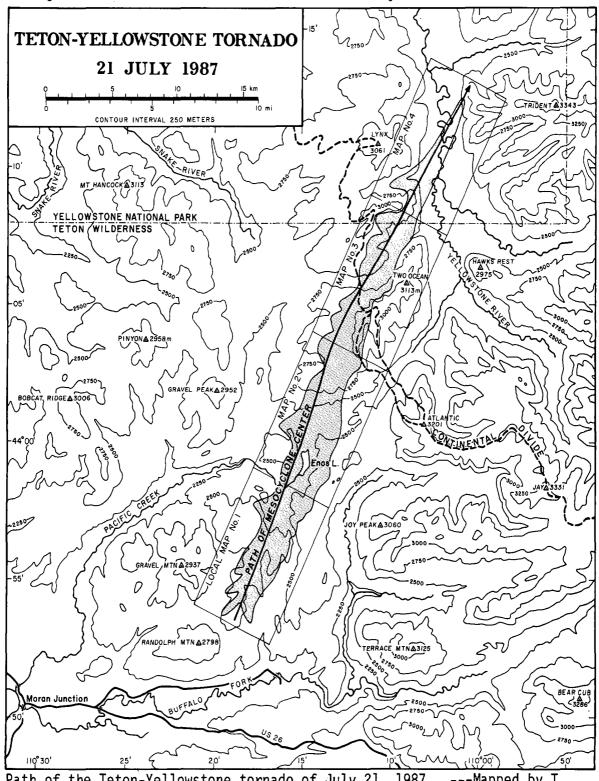




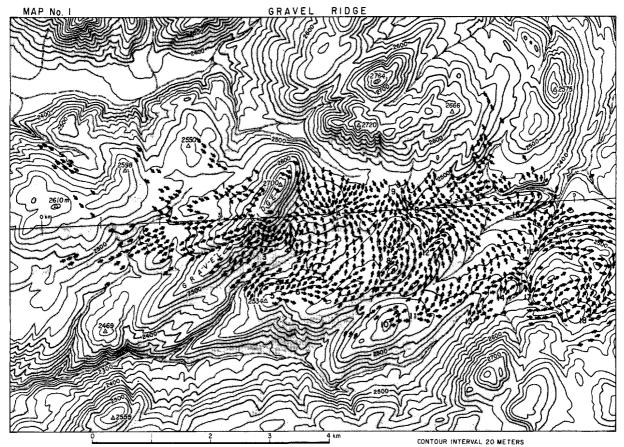




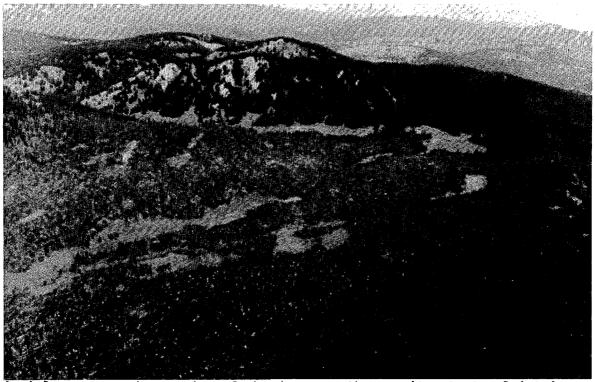
On the afternoon of July 21st, unusually severe thunderstorms moved northeast through northwest Wyoming and spawned the highest elevation F4 tornado ever documented. The tornado touched down in the Teton Wilderness Area about 10 miles east-northeast of Moran Junction (see map below) and created a massive blowdown of trees as it traveled north-northeast a distance of 24.3 miles before ending along the Yellowstone River in the southeast corner of Yellowstone National Park. The path averaged 1.5 miles in width, reached a maximum width of 2.5 miles, and contained 15,000 acres of mostly mature lodgepole pines that were snapped, uprooted, or in some cases pulled from the ground and carried a considerable distance by the tornado's winds.



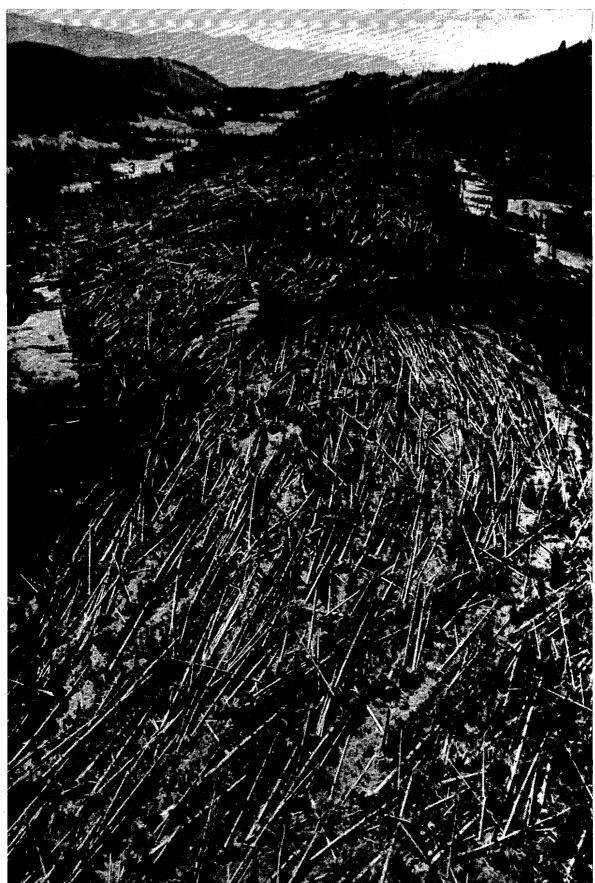
Path of the Teton-Yellowstone tornado of July 21, 1987. ---Mapped by T. Theodore Fujita from surveys by Bradley Churchill, James Partacz, and Brian Smith; all of the University of Chicago.



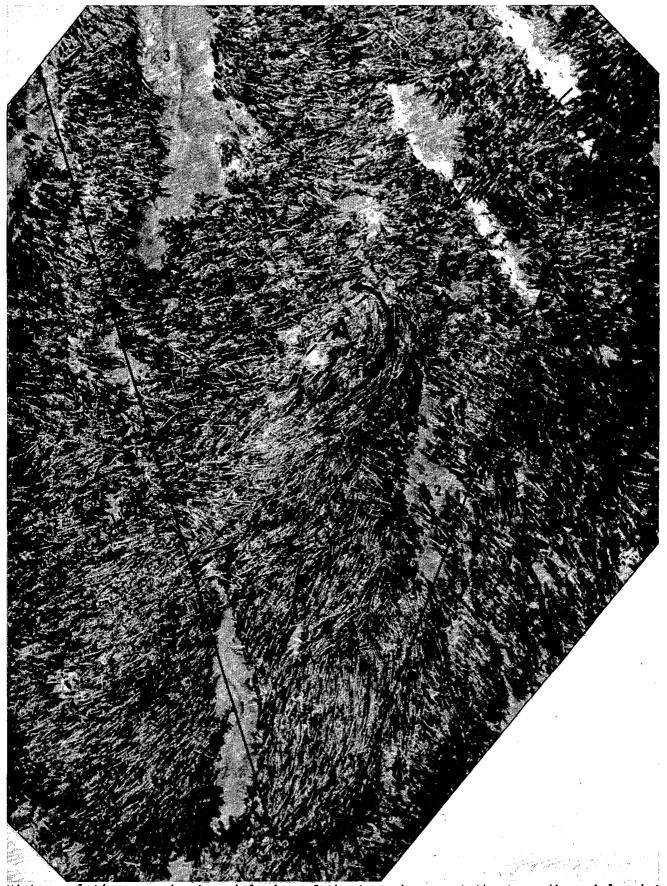
The first of four local maps that show the patterns of tree fall along the tornado's damage path (see map on previous page for location). The analyses, prepared from high resolution, overhead aerial photos, revealed that the overall damage was caused by a mesocyclone. In all, four tornadic swirl patterns (lettered) and 72 divergence patterns, mostly microbursts (numbered), were confirmed. ---Map by T. Theodore Fujita, The University of Chicago.



Aerial, west-northwest view of the damage path near its start. Point A corresponds to tornadic swirl A in the map at top; Gravel Ridge is at the left edge of the photo. ---Photo by James Partacz, The University of Chicago.



Snapped and uprooted trees as seen looking south from a helicopter toward the tornadic swirl point A. The damage intensity at this point was rated F4. The mesocyclone's center moved from right to left across the frame along the dashed line descending from Gravel Ridge. ---Photo by Bill Conradt, The Jackson Hole Guide.



High resolution, overhead aerial view of the tree damage at the tornadic swirl point A. The photo on the previous page was taken from c (camera) and the angle of view is indicated. Numbers 1, 2, and 3 mark corresponding positions within the two photos. ---Photo property of the University of Chicago.

#### TORNADO in the TETON WILDERNESS of WYOMING ---- continued



Forest Service personnel survey the 2.5 foot diameter stump of a large conifer that was snapped off at about 13 feet above the ground.

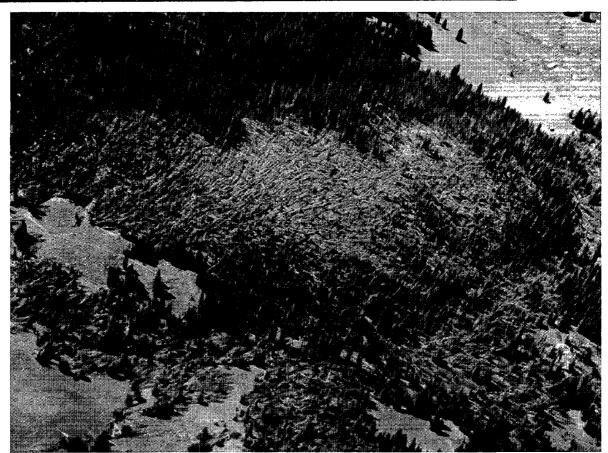


Dirt-filled root systems mark the location where whole trees were dropped by the tornado's wind after having been pulled from the ground and carried some distance. There were no holes or disturbances in the nearby ground to indicate the trees' source.

---Both above photos by Bradley Churchill, The University of Chicago.



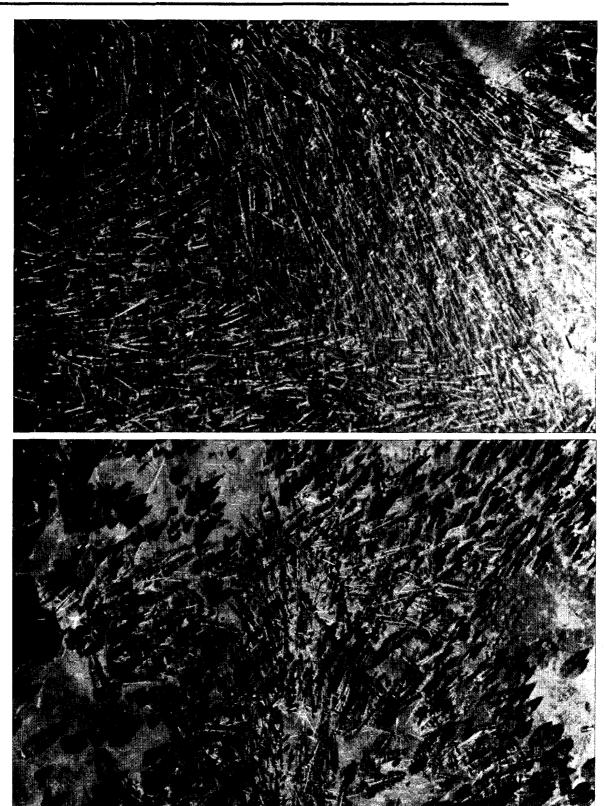
Thousands of mowed down trees litter the mountainous terrain approximately 5 miles along the path of damage. Few trees were left standing within the path in this area. ---Photo by James Partacz, The University of Chicago.



A series of three divergent (spreading fanlike) tree fall patterns shows where corresponding microbursts within the mesocyclone circulation, descended to the ground.



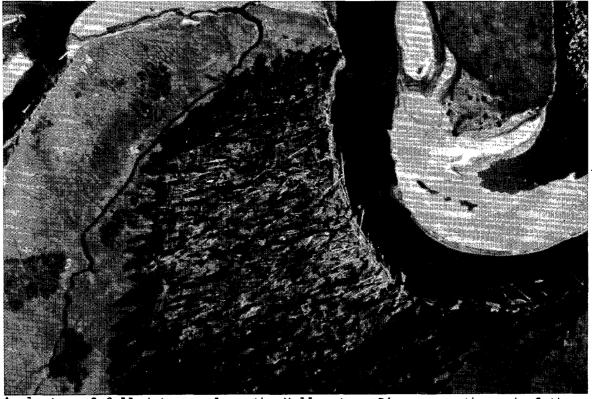
Close-up, overhead view of one of the divergent tree fall patterns marking the location where a microburst descended to the ground.



Crossing divergence patterns in both above photos illustrate the sequence of microburst occurrences as the mesocyclone center moved from the left to right side of the shown areas, passing just outside of the top of the photos. At top, trees were first blown down from left to right across the bottom of the picture, then a second microburst downed the trees from upper left to lower right. At bottom, trees were first downed from the bottom to the top of the photo, and then from the left to the right side. Note that in the second case the microbursts were much smaller, leaving narrower paths.



Tree destruction, across the photo top and lower right, continued across a glacial cirque about two-thirds of the way along the damage path. The ridge of the cirque marks the Continental Divide. The tornado passed over its highest elevation of 3070 meters at this location.



A cluster of felled trees along the Yellowstone River near the end of the damage path. By this point the path had narrowed considerably.

---All photos on pages 11 through 13 by Brian Smith, The University of Chicago.

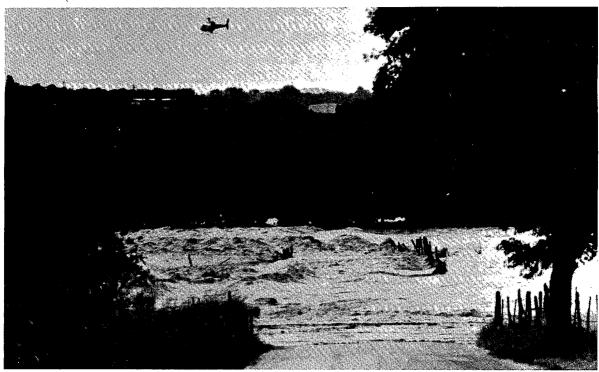
During the evening of July 16th and the early morning of the 17th, moisture-laden thunderstorms moved slowly eastward through the Hill Country of South-Central Texas, producing flash flooding across seven counties north and northwest of San Antonio. The train-effect storms, one following another, dumped as much as 11.50 inches of rain 9 miles west of Hunt, and 5 to 10 inch amounts were common throughout the area. The resulting flooding was mainly concentrated along the Guadalupe River and its tributaries, the same area that was heavily affected by flooding in late May and early June 1987 (see June 1987 Storm Data). However, this flooding resulted in a tragic loss of life when a bus and van leaving a summer camp became stranded in floodwaters along the Guadalupe River just west of Comfort. As the vehicles were being evacuated, a surge of water rushing downstream swept 39 teenagers and 4 adults into the raging river. Ten persons drowned and the remaining 33 were rescued by helicopter, mostly from tree tops to which they were clinging.



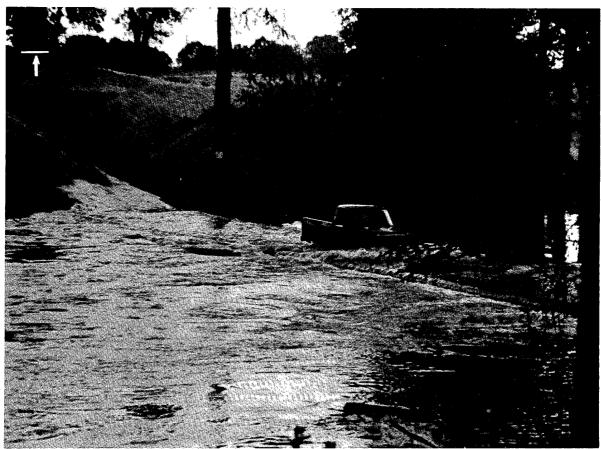
Turtle Creek flowing about 3.5 feet deep over Texas Highway 16, 8 miles southwest of Kerrville. ---Photo by Susan M. Sander, The Kerrville Daily Times.



A house is half submerged by Guadalupe River flooding along Texas Highway 27 between Comfort and Center Point at 0700CST on July 17th. ---Photo by Susan M. Sander, The Kerrville Daily Times.

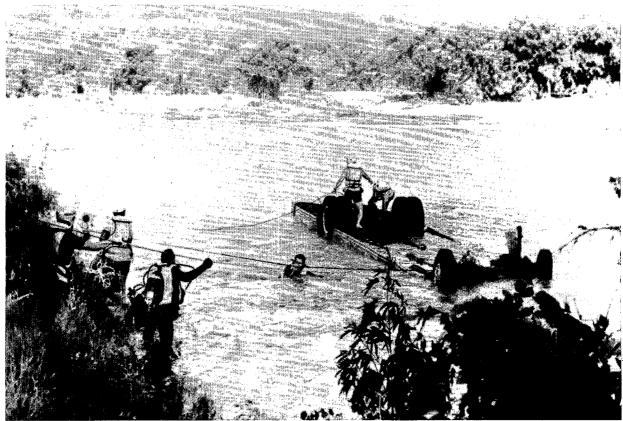


Floodwaters from the Guadalupe River churn over the road to Hermann Sons Crossing on July 17th, about 2 miles southwest of Comfort. This is the location where the bus and van were swept into the river. Numerous rescues by helicopter were made from the trees in the distance. Pictured here, the river is about two-thirds of a mile from its normal bank.



Hermann Sons Crossing on July 22nd, 5 days after the peak of the flooding. Waters had crested at the level indicated by the white line at left (arrow).

---Both above photos by Susan M. Sander, The Kerrville Daily Times.



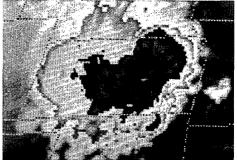
Divers attach cables to the overturned and submerged, Seagoville Road Baptist Church bus that was swept away along with 35 passengers by the Guadalupe River. Below, the bus is pulled from the river. The remaining 8 persons involved in the incident were in a van. ---Both photos by Carol E. Pfeiffer of Boerne, Texas; and supplied by Bill Hare, NWSFO at San Antonio, Texas.

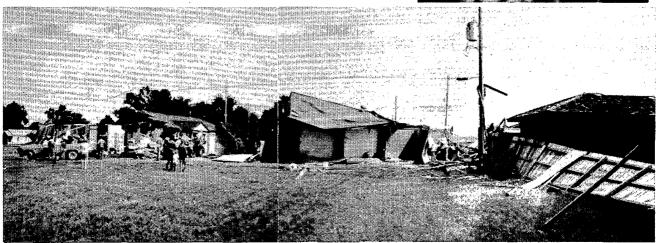


#### TORNADOES and THUNDERSTORM WINDS in KANSAS on July 5, 1987

Three lines of severe thunderstorms marched through Kansas during the morning of July 5th, one of which developed over Wichita in south-central Kansas and produced three tornadoes and widespread damaging winds as it moved east toward El Dorado and Winfield. Surface winds of 80 to 100 mph were generated as the strongest part of the storm line crossed southern Wichita and moved through Butler County. Although all three tornadoes were short-lived, one that touched down in Douglass produced F2 intensity damage that included the destruction of a small commercial complex containing a restaurant, convenience store, and small office building. The roof of the office building crashed into one home, and six other homes received lesser damage.

RIGHT: A GOES 6 satellite, infrared image of the thunderstorm activity over Kansas at 0600CST on July 5th, just 15 minutes after the occurrence of the Douglass tornado. Shown are the first line of storms which formed in western Kansas and moved into south-central Kansas, and the second, stronger line that formed over Wichita. The northern portion of the second line would later regenerate and trek from Emporia to Kansas City. ---Photo from NESDIS.





The initial structural damage caused by the F2 tornado at Douglass, viewed toward the north in a composite photo. A portion of the roof from the building in the center of the picture landed on a house across the street.

RIGHT: Debris litters the parking area in front of a building that had its roof removed by the tornado. The view is toward the south.

---Both damage photos by Phil Swain, NWSO at Wichita, Kansas.





A Douglass home that received substantial damage when the roof of another building mentioned on the previous page was dropped onto it by the tornado. The home's owner is consoled by a friend in the foreground. ---Photo by Don Shreve, The Wichita Eagle-Beacon.



Remains of a convenience store in Douglass that was destroyed by the tornado, shown here after salvagable contents were removed. The store was struck shortly after being opened for business early on the Sunday morning, and the employee who quickly sought cover narrowly escaped injury as the building was blown apart. ---Photo by Jeannette Nichols, The Arkansas City Traveler.

#### TORNADOES and THUNDERSTORM WINDS in KANSAS ---- continued



The convenience store as perishables and other merchandise contents were being removed. The direction of view is southwest.



A home that was unroofed by thunderstorm winds at 15th and Grove in northeast Wichita, also on the morning of the 5th.

---Both above photos by Phil Swain, NWSO at Wichita, Kansas.

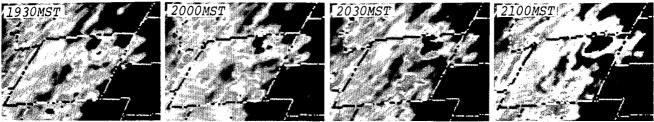


A home southeast of Topeka, Kansas near Berryton, of which the roof of the attached garage collapsed during the strong winds that accompanied the third line of storms that struck Kansas on the morning of the 5th. ---Photo by Steve Wolgast, The Topeka Capital-Journal.

---All damage photos on pages 17 through 19 supplied by Steve Schurr and Bill Barlow, NWSFO at Topeka, Kansas.

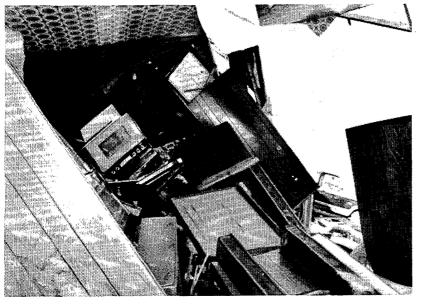
#### 4. THUNDERSTORM WINDS at GILLETTE, WYOMING on July 30, 1987

On the evening of July 30th, an unusually strong thunderstorm for northeast Wyoming moved northeast through south and east sections of Gillette, bringing with it 50 to 60 mph winds and 1.50 inches of rain in an hour. Wind damage included the destruction of a mobile home and several horse stalls, partial destruction of several roofs, and damage to many city and state road signs. Lightning knocked a hole in the ceiling of one Gillette home, and the heavy rains caused flooding in many streets and a few apartments.

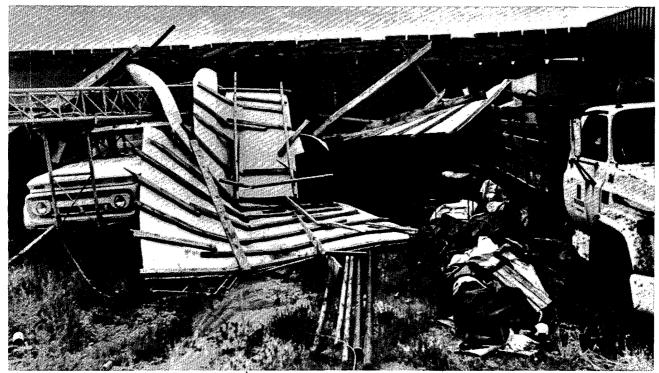


GOES 6 satellite, infrared images show the development of the severe thunderstorm in northeast Wyoming that passed through Gillette between 2100MST and 2200MST on July 30th. ---Photos from NESDIS.





An unoccupied mobile home in Gillette (top) was destroyed by the strong thunderstorm winds, even though it was securely tied down. The force of the winds twisted the trailer onto its roof, pulling the anchors from the ground in the process. Contents of the home (left) including furniture, stoves and bath tubs were piled onto the ceiling as a result. ---Both photos by Kathy Novak, The Gillette News-Record; and supplied by Hugh McRandal, NWSFO at Cheyenne, Wyoming.



A section of roof that was torn from the Gillette Lumber Mart by the thunderstorm's winds. The roof was blown into a building and parking lot adjacent to the mart. ---Photo by Kathy Novak, The Gillette News-Record; and supplied by Hugh McRandal, NWSFO at Cheyenne, Wyoming.

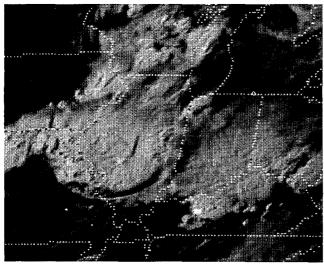
#### 5. TORNADO near SCOTT CITY, KANSAS on July 7, 1987

On the evening of July 7th, a small Fl tornado touched down northeast of Scott City, Kansas and destroyed a barn, pictured below, and a grain bin at a farm. The farm's owner and his family took shelter in the farmhouse basement due to the storm's strong winds, but were suprised by the damage when they emerged. Having only heard the whistling of the wind and not the roar expected with a tornado, they did not suspect the existence of the tornado which was confirmed by a sheriff's officer. ---Photo by Dennis Lundgren, The Garden City Telegram; and supplied by Steve Schurr, NWSFO at Topeka, Kansas.

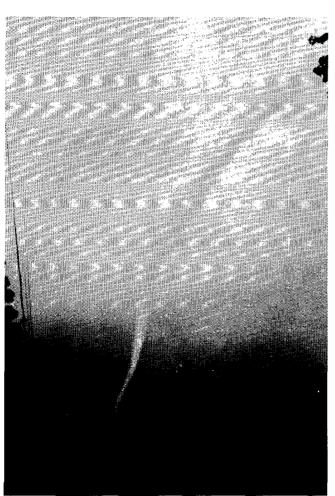


#### 6. TORNADO at MOROCCO, INDIANA on July 6, 1987

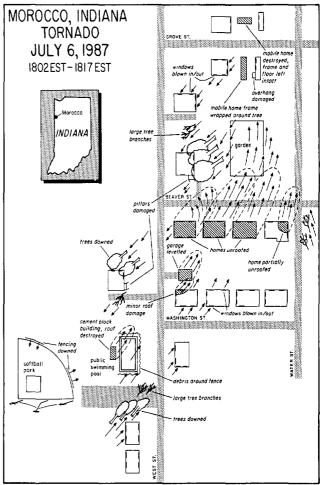
During the early evening of July 6th, a strong mini-tornado inflicted up to F2 intensity damage in western sections of Morocco, Indiana. After initially touching down in farm fields west of town, the tornado traveled northeast along a path about 7/8 of a mile long and up to 250 yards wide, and damaged 16 homes and 4 mobile homes as it entered the town. Two of the mobile homes were totally destroyed. A softball field and a public swimming pool facility were also damaged. Three people received injuries.



LEFT: A GOES 6 satellite, visible image taken at 1830EST on July 6th, just 13 minutes after the Morocco tornado ended, shows that the tornado was spawned by a newly formed storm at the northeastern edge of a storm line that arced westward through southern Illinois and into northeast Missouri. Note the outflow boundary at the southern edge of the line.
---Photo from NESDIS.



The Morocco tornado viewed toward the northwest at 1812EST. ---Photo by Mr. Dowtv of Morocco, Indiana.



Schematic mapping of the damage area in western Morocco. Vectors indicate the direction of debris movement, or winds as inferred from the damage configuration. ---Map by Ron W. Przybylinski, NWSFO at Indianapolis. Indiana.



Southwest view of the damage at the public swimming pool located in the city park at the west edge of Morocco. The cement block building (center) lost its roof.



Southeast view of two homes along Beaver Street that were unroofed.

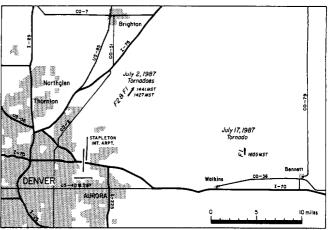


Southeast view of a mobile home on the south side of Grove Street that was completely destroyed, its frame having been wrapped around a 4.5 foot diameter tree.

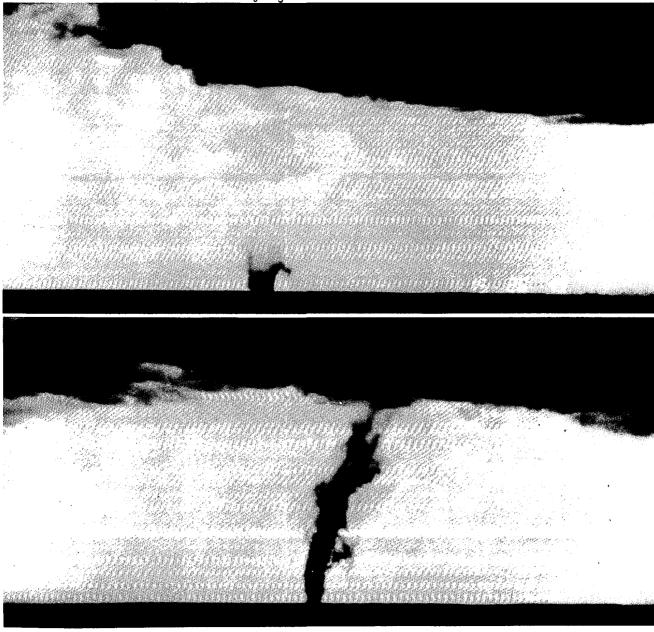
---All above photos by Ron  $\mbox{W}.$  Przybylinski, NWSFO at Indianapolis, Indiana.

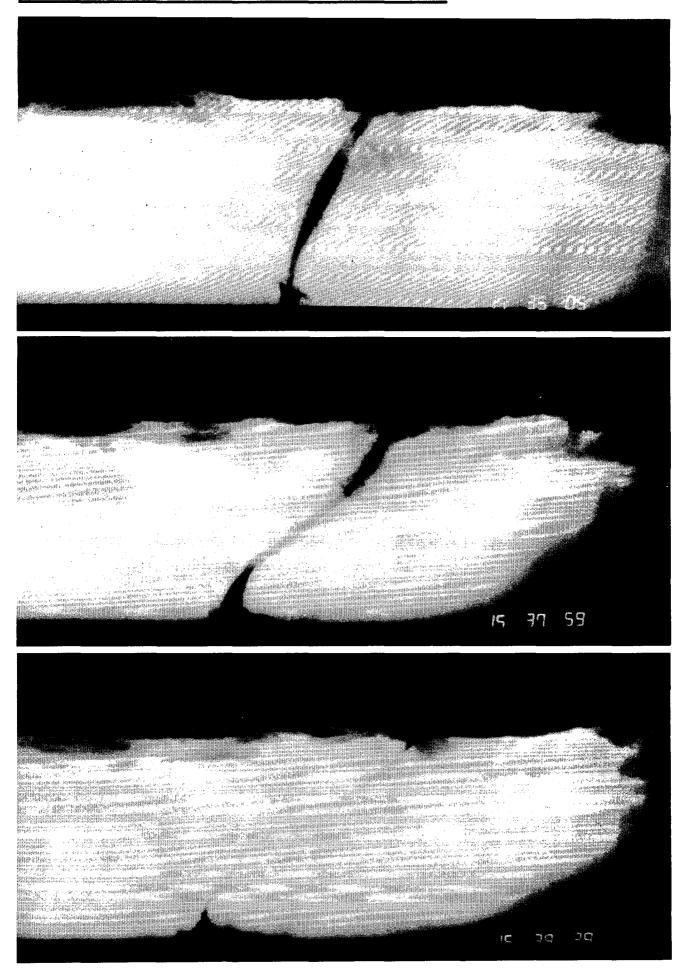
#### 7. TORNADOES near DENVER, COLORADO on July 2 and 17, 1987

As is common during the summer months, many tornadoes were spawned by thunderstorms in the Denver area and elsewhere along the lee of the Colorado Rockies during July. Two of such events, mapped at right, occurred on July 2nd and 17th in the area northeast of Denver and were observed and photographed by storm researchers. In both cases the tornadoes were made visible by entrained dust, since boundary layer moisture conditions in the region rarely permit the formation of a condensation funnel.

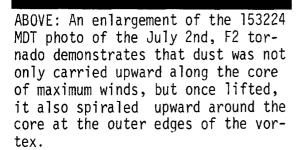


Below and on the following page, a 5-photo sequence shows the entire life cycle of the July 2nd, F2 tornado from its inception to its rope or dying stage. For only about two minutes of its 14 minute life, the tornado was accompanied by another, F1 tornado that spun around it in a helical pattern. This tornado's vortex is barely visible near the thunderstorm's cloud base, crossing at nearly a right angle to the funnel of the F2 tornado in the 153505 photo. The indicated times are in hours, minutes and seconds, Mountain Daylight Time.

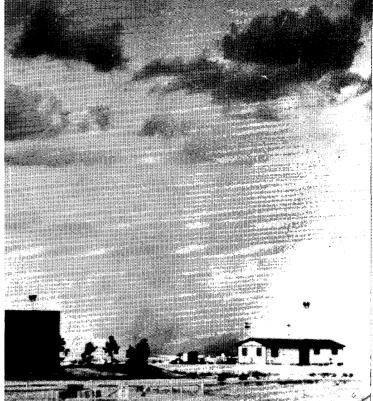


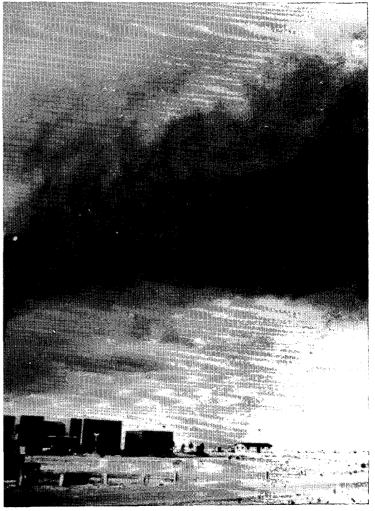






RIGHT: The July 17th, F1 tornado as it was seen from the Front Range Airport near Watkins (top) appears as only a broad surface dust swirl; but note the accompanying swirl in the parent thunderstorm's cloud base (bottom), indicating that the vortex is in fact a tornado.

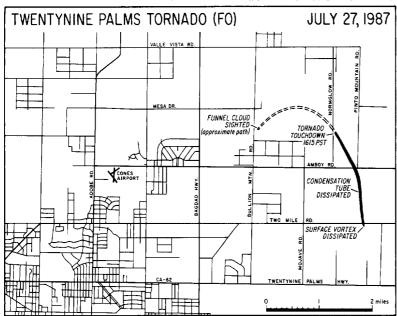


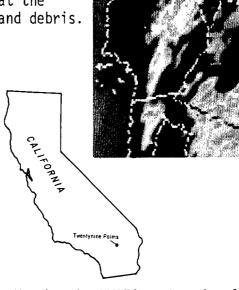


---Map and all photos on pages 24 through 26 by Roger M. Wakimoto, UCLA, Los Angeles, California.

#### 8. TORNADO at TWENTYNINE PALMS, CALIFORNIA on July 27, 1987

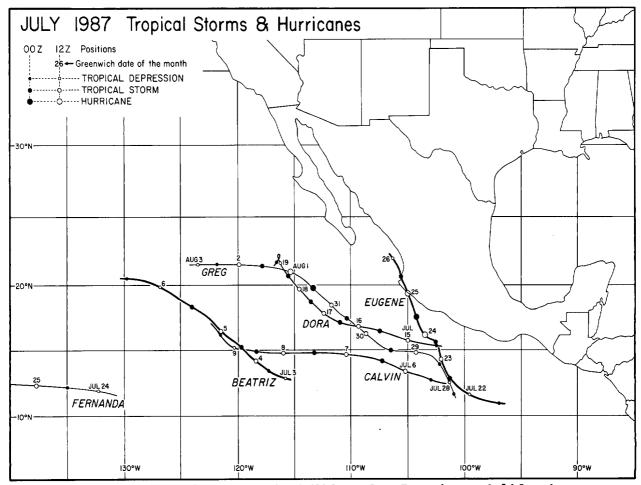
At 1615PST on July 27th, a rare Southern California desert tornado touched down in the northeast outskirts of Twentynine Palms. It was initially sighted as a funnel cloud moving northeast, but soon touched down and traveled south-southeast about 1.5 miles as a tornado. Its condensation funnel dissipated after 1 mile of travel, but the vortex was apparent at the surface for another half mile due to entrained dust and debris.





---Map by the NWSFO at Los Angeles, California; satellite photo from NESDIS.

#### TROPICAL STORMS AND HURRICANES



---Best track data from the NWSFO at San Francisco, California.

#### STORM DATA AND UNUSUAL WEATHER PHENOMENA

JULY 1987

PLACE	TIME - LOCAL STANDARD STANDARD STANDARD STANDARD STANDARD (VALES) WIDTH OF PATH (YARDS) CHUCES) CHUCES CHUCE	PLACE	TIME - LOCAL STANDARD  STANDARD  STANDARD  FINANCE  WIDTH OF PATH WIDTH							
	TIME - LOCA STANDARD LENGTH OF PATH (MILES) WIDTH OF PATH (VARDS) RILLED ROPERTY ROPERTY CROPS CHOUSE CHARACTER OL STANDARD OL		TIME - LOCA STANDARD LENGTH OF PATH (YAROS) CROPS CROP							
1 ALABAMA		ALABAMA								
Covington County	Ol 1145CST 0 0 ? 0 TSTM Wind Numerous trees and power lines were downed in the city of Andalusia. Some trees were split by lightning strikes.	Cullman County	13 1720CST 0 0 ? 0 TSTM Wind Numerous trees were downed in the city of Cullman and Cullman County. Several broken power poles were also reported.							
Autauga County	Ol 1320CST 0 0 ? 0 TSTM Wind Large trees were downed on U.S. 82 near Practiville. Large limbs were torn from trees between Billingsley	Walker County	13 1745CST 0 0 ? 0 TSTM Wind Four trees were uprooted near Sipsey.							
Mostoness Courts	and White City and along County Road 57 in morthern Autauga County.  Ol 1330CST 0 0 ? 0 TSTM Wind	Geneva County	14 1315CST 0 0 5 0 TSTM Wind Four chicken houses were damaged while a barn and an office building were destroyed 5 miles southeast of Samson.							
Montgomery County	01 1330CST 0 0 ? 0 TSTM Wind 1345CST 0 0 ? 0 TSTM Wind Two trees were downed along I-65 in the city of Nontgomery near Sports Acres at 1330CST. Large tree limbs were blown down in both north and southeast Montgomery at 1345CST. Torrential rain and severe lightning was also reported.	Montgomery County	25 1615CST 0 0 ? 0 TSTM Wind Trees were downed in the city of Montgomery and in Snowdown on U.S. 331 south of Montgomery. Several trailers in a mobile home park suffered awning damage in southeast Montgomery.							
Blount County	04 0100- 2 0 ? Flash Flooding 0530CST	Randolph County	25 1715CST 0 0 ? 0 TSTM Wind Several trees were blown down 2 miles west of Romoke.							
	A phenomenal 8.6 inches of rain fell in Oneonta during the early morning hours. It was the most rainfall in a 24 hour period in the 30 years weather records have been kept for Oneonta. The heavy rains caused considerable flooding of roads, fields, buildings and parking lots in Oneonta. Several roads and bridges	Chambers County	25 1737CST 0 0 ? 0 TSIM Wind A service scation pump island roof awning was blown off in LaPayette. Power lines and trees were downed in numerous places throughout the county.							
	were temporarily closed due to high water and mud slides near Oneonta. Water accumulated 4 feet deep in the basement of a local hospital. A 52-year-old man and his 62-year-old wife drowned at about 0615CST when their car	Butler County	25 1750CST 0 0 ? 0 TSTM Wind In Greenville, power lines and several large trees were blown down. Large trees fell onto two houses.							
Bishar Course	was swept off a submerged lake spillway as they attempted to cross a dam. The accident happened about six miles east of Oneonta. Flash Flooding M52V, F62V.	Baldwin County	26 0035CST 0 0 ? 0 TSTM Wind 0 0 ? 0 Hail (1.00) In Bay Minette, several power lines and tree limbs were blown down. Quarter size hail also fell.							
Pickens County	04 1250CST 0 0 ? 0 Hail (1.75) Golf ball size hail fell in the Pickens County community of Reform.	Baldwin County	26 OlOCCST O 1 5 ? TSTM Wind A microburst affected an area 1/4 mile wide and 4 miles long in Loxley. One woman received minor							
Jefferson County	04 1508CST 0 0 ? 0 TSTM Wind Two trees were blown down in the Center Point area of northeast Birmingham. Pea size hail also fell in the same area and in Pinson.		injuries. Two mobile homes were destroyed. Two cars were destroyed and one car damaged. Numerous trees were uprooted. The nuts were blown off pecan trees in several orchards. Damage was estimated to be around \$100,000.							
Randolph County	05 1450CST 0 0 ? 0 Hail (0.75) Dime size hail was reported at Wedowee.	Covington County	26 2040CST 0 0 ? 0 TSTM Wind Several trees were blown down in Florala, Alabama.							
DeKalb County	06 1600CST 0 0 ? 0 TSTM Wind Several trees were blown down in Rainsville.	Dale County	28 1340CST 0 0 ? 0 TSTM Wind 1400CST 0 0 ? 0 TSTM Wind							
Marshall County	06 1710CST 0 0 ? 0 TSTM Wind In and near Guntersville, several trees and numerous limbs were blown down. Two power poles were blown down and several power lines broken. Lightning strikes destroyed 5 or 6 power transformers.	Houston County	Trees and power lines were blown down at Ariton at 1340CST. Trees and power lines were blown down at Daleville at 1440CST.  28 1415CST 0 0 ? 0 TSTM Wind							
Blount County	06 1800CST 0 0 ? 0 TSIM Wind A grocery store about 6 miles north of Oneonta had the roof blown off. Power outages due to fallen	Geneva County	Several trees were blown down in the Ashford area about 10 miles southeast of Dothan.  28 1420CST 0 0 7 0 TSIM Wind							
Blount County	tree limbs were reported in the same area.  06 1820CST 0 0 ? 0 TSTM Wind	,	Trees and power lines were blown down at Hartford. A severe electrical storm was also reported.							
	Trees were blown down over Tidwell Holiow Road in Allgood. Falling tree limbs broke power lines disrupting telephone and electrical service.	Dale County	28 1420CST 0 0 ? 0 TSTM Wind Trees and power lines were blown down at Clayhatchee.							
Cullman County	06 1830CST 0 0 ? 0 TSTM Wind Trees were blown across a residence on HWY. 69 in Baileyton. A chicken house fire was caused by lightning	Baldwin County  Mobile County	28 1435CST							
Mobile County	in the Fairview community.  11 1710CST 0 0 ? 0 TSTM Wind 11 the Dawes community, a microburst blew numerous large tree Limbs down. Winds of 55 to 60 mph and pea size	noorie County	30 1420CST 0 0 ? 0 TSTM Wind Several large trees were downed by high winds in Mobile and a large sign was blown into a street near Airport Boulevard.							
Lawrence County	hail were reported.									
	1600CST 0 0 7 O TSTM Wind Large trees were downed in the city of Town Creek in northwest Lawrencé County at 1548CST. At 1600CST, large trees were downed and power outages were reported in the cities of Courtland and Town Creek as well as much of northeastern Lawrence County.	<sup>2</sup> ARIZONA								
Limestone County	13 1605CST	Maricopa County,	14 2100MST 0 0 2 0 Thunderstorm Wind							
Mania- Com-	Trees were downed and three-quarter inch hail fell at Elkmont in northeast Limestone County.		Thunderstorms developed over the East Valley during the evening. Some power lines were downed, at least one oak tree was uprooted, and about 15,000 residents were left without power.							
Marion County	13 1607CST 0 0 ? 0 TSTM Wind Several trees were uprooted along HWY.129, 3 miles southwest of Haleyville.	Cochise County, 25SE Willcox	16 1500MST 0 0 0 ? Hail							
Madison County	13 1655CST 0 0 ? 0 TSTM Wind A trailer was destroyed and several large trees fell on power lines in Southwest Huntsville and in central Madison County.	Mohave County, Bullhead City	Thunderstorms quickly formed over rural areas of the county.  16 2145MST 0 0 2 0 Thunderstorm wind  Thunderstorms formed initially in Southern Nevada but moved into Arizona and intensified rapidly. Wind gusts were estimated up to as high as 70 mph.							

#### STORM DATA AND UNUSUAL WEATHER PHENOMENA

JULY 1987

		T-		NO. 0	ne l	ESTIMA	TED!		<del> </del>		T -	1	<del>-</del>		110	OF	E0+11	AATED!	Γ
	XCAL	PATH	Ħ.	PERSO		ESTIMA DAMA					XCAL		PATH	Ē	PER	SONS		WAGE	
PLACE	DATE TIME - LOCAL STANDARD	LENGTH OF I	WIDTH OF PATH (YARDS)	KILLED	INJURED	PROPERTY	CROPS	CHARACTER OF STORM	PLACE	DATE	TIME - LOCAL	STANDARD	LENGTH OF F	WIDTH OF PATH (YARDS)	KILLED	INJURED	PROPERTY	CROPS	CHARACTER OF STORM
ARIZON	Α		· · · · · ·						ARKANS	AS					L	1			•
Pima County,	20 1900MST			1 (	0	0	0 L	ightning	Independence County	27	1055	CST			1	0	_	-	High Heat
Robles Junction	A ham radic o			ectroc							7-year								-
Vanisana Caustu	a tower in his	yard.		0 1	Li n	ightnir 4		0. hunderstorm wind		ins	esvill ide he	r con	plete	ly clo	osed t	raile	er wher	n	
Maricopa County, Mesa	26 1800MST A roof was ble	wn off	the Co		•	4 las Pun			0. 0	t	was f		dead	by ner	aaugn	ter.	1770	•	
	About 25 trees heavy rain his golf course as	were Dobso	uproote n Ranch	d or si	nappe ces w	ed off ere da	as hi maged	gh winds and on the	Conway County	Lig	1105 htning charg	stru							
Cochise County,	29 1500MST			0 (	0	0	0 F	lash flooding		req	7-year Juired	hospi	taliz	ation.	She	had a	a punct	tured	
Bisbee	Very heavy sto							f rain in d Brewry Gulch.		агп	drum, n, and								•
Maricopa County,	31 1800MST	_		0 (	0	4		hunderstorm wind	Van Buren County		1600	CST			0	0	3	_	Lightning
Scottsdale and Phoenix	Intense thund	erstorm	s moved	l rapid	ly ac	ross t	the no	rtheast portions		Lig	htning	oper						rted	·9···0
	of the Greater	ch. Al	most 2	inches	of t	ain fe	ell in	wn in parts of Phoenix; on Scottsdale		as	mall a	ttic			ome in	Clir			
	Road was structures were known	k by 1	ightnin	ig, cau	sing	a smal	l fir	e. Numerous	Grant County	29			ha *	b	l <sub>.</sub>	0 Do	-	-	High Heat
	- TEES WELL KIN	. Sacu u	1162							col	orker lapsed theast	in t	he he	at and	died,				
									Pulaski County	29	1530				0	0	3	-	Thunderstorm Wind
											ree wa crushe								
	•								Jefferson County	30	UNK				1	0	-	-	High Heat
3 ARKANSAS						,					7-year it stro			rom Pi	ne Blu	ff di	led of		
Jefferson County	04 UNK			1 (	0	-	-	High Heat	Lawrence County	30	1830C	ST			0	0	4	-	Thunderstorm Wind
	A 57-year-old heatstroke wh M570.									the	hunder Walnu ence a	t Rid	ge Co	untry (	Club.	It a			:
Union County	06 1735CST			0 (	0	-	-	Hail (1.75")	Garland County	31	12400	ST			0	0	5	-	Thunderstorm Wind
	Golfball size plant in the									unr	ts from	a rec eatio	reati mal v	on bui ehicle	lding park	under in Ho	const	tructio	on.
Union County	06 1752CST Hail ranged in			,	0 o gol	- fball	-	Hail (1.75°)			winds ceeded								
Carland Course	in downtown E	Dorad	10.	0 1	0	3	_	Thunderstorm Wind											
Garland County	A large tree of	h the	roof of	two.	The se at	•		Indiacided wind											
Independence	Hot Springs V	(llage.		0	0	? -	-	Thunderstorm Wind	4 CALIFORNIA	N	orthe	ern							
County	A thunderstor South Side, co Salado, Rosie	ausing	power o	utages	at S	South S	Side,		Siskiyou and Modoc Counties,	17			lav	dwann	od be	+110	an 4 -	- nd 0	f. Heavy Snow.
Cross County	23 1603CST			0	0	?	-	Lightning	and Sierra Nevada Range	in the	north Sier	ern	Cali	fornia	, and	i bet	tween	l and	inches of snow 1 4 inches in se National
	Lightning sta Wynne. A tel						n		Trinity County	Par 21	k. 14151	PST			0	0	?	?	Hail (0.75)
Saline County	23 1900CST			0	0	?	-	Flash Flooding		Thr	ee-qu	arte			meter	: hai	il was	s repo	orted at aller hail were
	Heavy rain ca The Police De Vehicles were water.	partmen	nt repo	rted th	nat s	ix	•			rec	eived	in s an	conji d moi	ınctic ıntain	n wit	h a it wa	thund as obs	dersto serve	orm in the
Jefferson County	24 1345CST			0 .	0	?	-	Flash Flooding											
	The Office of reported that to enter a ho	brief,	, heavy	rains	cause	ed run	off												
Cross County	24 1500CST			0	3	-	-	Lightning											
	Three women w place in Wynn of them, and Two were rele one required	e. Lig they re ased sh	ghtning equired hortly a	struck medica	c all al atı	three tentio	n.		4 CALIFORNIA  CAZ014 Owens Valley, Bishop	12	afte	rnoo		to 52	0 kno	0 ts we	? ere r	? eport	Thunderstorm Winds
Faulkner County	25 1700CST			0	0	4	-	Flash Flooding			hop a						'		==
	Between 3:20 rain fell in flooded and w Several busin inundated.	Conway. ater wa	. Many as knee	street deep i	is wer	re aces.		ū	CAZ012-013-018 Riverside County	Rai	1330 n in hour e ava	the . N	o fui	lwild rther	0 area repoi	0 tota rts 1	? alled regar	0.79	Thunderstorm inches in any damage

	<del>, ,</del>												,			,					JULY 198
PLACE	DATE	TIME - LOCAL STANDARD	LENGTH OF PATH (MILES)	WIDTH OF PATH (YARDS)	KILLED SAEA		PROPERTY	CROPS SEA	CHARACTER OF STORM	PLACE	DATE	TIME - LOCAL STANDARD	DEAG SO BEEN	(MILES)	WIDTH OF PATH (YARDS)	KILLED KILLED		PROPERTY WWD		a	HARACTER OF STORM
				¥	물	3	<u>~</u>	ž				IT	-		≱	물	₹	ă.	Š	L	
CALIFOR	RNIA,	South	ern							COLORA	DO										
San Bernardino County, Twentynine Palms  A funnel cloud moving slowly to the northeast was reported near Bullion Mountain Road and Mesa Drive. At Mojave Road, the funnel began to travel to the southeast and became a tornado east of Normglow Road, one half of a mile north of Amboy Road.  The Captain of the Wonder Valley Fire Station saw an apparent funnel cloud one-half mile northwest of Amboy Road and Pinto Mountain Road.						Northeastern Colorado COZ 011-012-014	Sev Col sou all Lar Col Wel	lorado ath of l affect ge ha: lorado d Cour	hunde Ha Wigg Sted. il br Spri nty.	erst il jins H oke	orms damage Sucail bis skyl:  . Ha:	were ed ov gar b roke ights il da	wide er 9 eets a fe in mage	900 ac s, cor ew win a mob ed cro	d in res o n, an dows ile h ps in	north f cro d bea in th ome n nort	e TSTMS eastern ps just ps just es town, ear heastern ms were				
	150 f and 1 inten towar roads began tion south trave Deter throu In ad duced area was d	eet and eaves w sity wa d the i , remai , moving tube di , of Amb lling s minatic gh cont dition heavy as well lestroye lightly y Fire	a he ere s s not nters ned s south outh n of act w to th rain d by dama	ight ceen sw known ection tation h towa ted an across the to ith se e torr and nu unocc a ligh ged du	of neavirling of the court of t	ar 80  ng at  he to  Amboysever  wo Mile  o's pel obs  stro  us li  g-cau  floo	0 fe its rnad al m le R uart ris Roa ath erve ng t ghtn ised ding	et, as base o move inutes oad. er to cloud d. was as in Desifice, and	iameter of ind dirt, rocks, . Its exact ed southeast oo Mountain s, and then The condensance-half mile continued complished externs protrikes in the ert Heights numerous roads the Wonder of rain in one	E of Littleton Ern. Littleton Highlands Rancl Ern. Aurora Adams County, NE Aurora Weld County: 6 S Rudson 33 SNB Grover Douglas County: 3 NNW Franktown near Franktown Morgan County: 3 S Wiggins Wiggins Wiggins Wiggins Douglas County, 3 S Franktown Morgan County: Wiggins Little Wiggins Wiggins Little Wiggins	02 02 02 02 02 02 02 02 02 02 02 02	1407M 1410M 1412M 1423M 1504M 1508M 1541M 1550M 1550M 1553M 1553M 1553M	IST							Hail Hail Hail Hail Hail Hail Hail Hail	(1.75) (1.75) (1.75) (0.75) (1.75) (0.75) (0.75) (0.75) (0.75) (0.75) (1.00) (1.75) (0.88) (0.88)
San Bernardino County, Twentynine Palms	Thunde	315PST erstorm ne inch en 1315	diame	eter h	heavy ail n	ear '		ver th	iail (1.00) ne mountains Palms	Elbert County, 6 S Elbert El Paso County, Black Forest Douglas County: Parker 5 E Parker El Paso County, Colorado Springs (Peterson Field Elbert County; Elizabeth NW of Kiowa	02 02 02 02 02	1615M 1719M 1956M 2004M 2007M 2005M	IST IST IST IST IST IST						1 1 1	Hail Hail Hail Hail Hail	(1.12) (1.75) (1.75) (1.00) (1.00) (1.00) (1.75)
Teller County COZ 014 El Paso County COZ 014	Golf	1648MS: Eball s: 1725MS:	ize ha		11 in 0	Wood Wood	lland 4	l Park O	Hail (1.75) Hail (1.75) of Colorado	1.25 NE Elizabeth El Paso County, Black Forest	Golfball size hail accumulated to a foot in dep 02 2140MST Hail (1 02 2200MST Hail (1										
El Paso County COZ 014	Spri 1 Ligh	ings, ca 1729MS ntning h	using Thit a itop t	roof church	and 0 h ste	0 eple was	damaq 3 in C	ge. O Colora	Lightning do Springs. , and the roof	Otero County COZ 016	3 0200MST 0 0 4 5 Hail A hailstorm cut a swath through Otero County. Extensive damage to beans, corn, tomatoes, he melons occurred near Fowler and Manzanola; 1 inches of rain fell in less than an hour. By							unty. s, ha a; 1	y, and to 3		
El Paso County COZ 014	l Hail cars		r nes in	diame	0 eter	0 fell	4 in W	0 Videfi	Hail (2.0) eld, damaging		cro	hail	had There	rea	ched ·	the R e dam	ocky age	ford to bu	area ildin	, sma gs in	shing more the town.
Larimer County COZ 011		1956MS'		11 ju:	0 st no	0 rth c	0 of We	0 elling	Hail (0.75)	Weld County COZ 011	1 i	1940 inch h	ail f	ell	betw	een A	ult		ierce	•	
Adams County COZ 011	2 A la Denv and Late move	1427MS0 arge to ver's St thick a er, it d ed slow! sipated	T 1.0 mado aplet at fir levelo y tow at 14	250 touche on Air st, ar ped a ard th 41MST	0 ed dor rport nd kid sinua ne no	0 wn 1( . Th cked ous n rthea was i	3 ) mil ne to up a copel ist.	0 es no ernado larg ike s The	Tornado (F2) rtheast of was vertical e dust cloud. hape as it tornado untry and did , and mailbox.	Morgan County COZ 012 Kit Carson County COZ 013	Gol A s nes 4 Hai sec	short ar Wig 00300 il up	size time gins, MST to ba of Bu	ear , da seb irli	lier magin all s	ll 6 the s g abo 0 ize b and	ame ut 0 atte	es wes storm 700 ac 6 ered t	t of drop res o 6 he no farml	Fort ped m f cro Light Hail rthea and,	ning, (2.75) stern cutting a
Adams County COZ 011	The	1435MS1 previou smalle	sly m	ention	ned to	ornac	lo wa	s acc	Tornado (F1) ompanied by a utes.		dan wer bea	ath of mage wa me dama ans, a	dama as es aged nd wh	ige stim at neat	3 mile ated a a car were	es lo at 5 deal all	ng a mill ersh hard	and 4 lion d nip in 1 hit	miles ollar Burl just	wide s. 6 ingto outsi	. Total 0 cars n. Corn, de town. d; they
Arapahoe County COZ 011	A 63	hwest p	old ma part o	f Auro	kille ora.	He w	lig as i	htnin n his			in fro	a hous	cture se ar O to	ed b nd r 010	y hai uptur OMST.	lston ed a	es. wate	Ligh er mai	tning n. T	star he st	ted a fire orm lasted
Boulder County COZ 011	southwest part of Aurora. He was in his backyard and had a shovel in his hand at the time of the strike.  2 1734MST 0 4 0 0 Lightning A group of soccer players were hit by lightning on a field in Boulder. A 10-year-old boy was critically injured and was hospitalized; fortunately, he recovered six other people were knocked to the ground by the strike. Two 9-year-old boys and a 43-year-old man were slightly injured.							Adams County COZ 012  Arapahoe County COZ 011  Arapahoe County COZ 011	A microburst damaged three cars in southeast Aur							7 miles d until winds Aurora. (1.25) 14MST a					

#### STORM DATA AND UNUSUAL WEATHER PHENOMENA

JULY 1987

. ]	I NO. OF ES	TIMATED		JULY 1987						
PLACE	DEUCA TA	DAMAGE CHARACTER OF STORM	PLACE	TIME - LOCAL STIME - LOCAL STIME - LOCAL STIME - LOCAL WILLES WILLES WOOPE RY NIUNE D WOOPE RY NOTH ROS OF STIMULES OF STIMULES OF STIMULES OF STIMULES CHARACTER OF STIMULES CHARACTER OF STIMULES OF STIMULES CHARACTER OF STIMULES OF S						
COLORAD	0		COLORAC	00						
Larimer County CO2 011	4 1513MST 0 0 0 3/4 inch hail fell 10 miles west		El Paso County COZ 014	8 1755MST 0 0 0 0 Tstm.wind (58) A gust of 58 mph was produced by a thunderstorm at						
Adams County CO2 012	4 1545MST 0 0 0 0 3/4 inch hail fell at Strasburg.		Weld County COZ 012	Fort Carson.  8 1818MST 0 0 0 0 Hail (1.5) 1% inch hail fell 4 miles northwest of Keenesburg.						
Logan County COZ 013	4 1726MST 0 0 0 0 Golfball size hail fell in the e ling. At 1733MST, hail of iden one mile southeast of the city.	astern part of Ster-	Sedgwick County COZ 013	9 1500MST 0 0 ? ? Hail (4.5) Large hail fell in the Julesburg area from 1500 to 1515MST. A fe stones were as large as softballs at 1509MST, and goifhall size ha fell during the entire period. 1½ inch hail was observed a mile						
Lincoln County COZ 014	4 1830MST 0 0 3 Golfball size hail fell 9 miles damaging cars and breaking a few		Washington County	south of the town at 1515MST. No reports of damage were received, but some undoubtedly occurred.  9 1710MST 0 0 0 Tstm. Winds (G60)						
Douglas County COZ 011	7 1334MST 0.2 20 0 0 0 A tornado touched down 1 mile so	0 Tornado (F1) outh of Castle Rock.	COZ 012	A thunderstorm microburst produced a gust of 60 mph at Akron.  9 1810 MST 0 0 0 0 Tstm. Winds (658)						
Douglas County COZ 011	7 1339MST 0.2 20 0 0 0 A tornado was spotted 25 miles s	0 Tornado (F1) outhwest of Franktown.	COZ 011 Kiowa County	A thunderstorm microburst produced a gust of 58 mph at Bris.  11 1730MST 0 0 0 0 Hail (1.75)						
Douglas County COZ 011	7 1344MST 0.2 20 0 0 0 A tornado touched down for a min	0 Tornado (F1) ute in Castle Rock.	COZ 017	Colfball size hail fell 4 miles west of Sheridan Lake.  11 evening 0 0 3 0 Lightning						
Elbert County COZ 012	7 1517MST 0.2 30 0 0 0 A tornado touched down briefly 1 Deer Trail.	0 Tornado (F1) 0 miles southwest of	COZ 014	Lightning killed seven head of cattle, valued at a total of \$3500, near Ramah in extreme northeast El Paso County.						
Weld County COZ 012		IST, moving slowly toward	Northern and Central Mountains COZ 002-004	Numseasonably cool storm produced 10 inches of snow atop Mt. Evans in Clear Creek County, at an elevation of just over 14 thousand feet. The road to the summit was closed. 3 inches fell as low as Echo Lake, just below 11 thousand feet. Several spots at lower elevations in the northern mountains had over an inch of rain.						
Weld County COZ 012	A tornado touched down near Kers northeast at about 20 mph. It s until about 1605MST, destroying	stayed on the ground a barn 3 miles east of	Adams County COZ 011	17 1605MST 0.3 20 0 0 0 0 Tornado (F1) A small tornado was sighted near Watkins in the vicinity of the Front Range airport.						
	Gill near the end of its path. accompanied by heavy rain; 1% to Kersey in 30 minutes, causing so	The twister was 2 inches fell at	Larimer County COZ 011	19 1635MST 0 0 0 0 Tstm. Winds (G60) A 60 mph microburst was recorded in Fort Collins. A tree was blown down, and a few other trees lost limbs.						
Weld County COZ 012	7 1635MST 0.5 50 0 0 0 A tornado was spotted 7 miles so		La Plata and Montezuma Counties	21 1530MST 0 0 5 4 Wind, Hail A heavy thunderstorm hit the Mancos area. High winds and hail						
Otero County COZ 016 Yuma County	7 1814MST 0.5 30 0 0 0 0 A tornado was observed a few mil La Junta. 7 1925MST 0.2 30 0 0 0	es northeast of	COZ 007	knocked down trees, broke windows, and damaged cars and roofs in the town. Fruit trees were stripped, and one building was unroofed. A police car was dented by hail. The hail piled up eight inches deep in one spot during the 15 minute storm. Total						
COZ 013	A tornado touched down briefly 4 Yuma.			damage was estimated at \$100,000. In adjacent La Plata County, heavy rains triggered a mudslide which closed U.S. 550 just north of the New Mexico border. A natural gas line was broken.						
Eastern Colorado COZ 011-012-013- 015	7 afternoon-evening 0 0 4 Severe thunderstorms hit many are Colorado, and also in the souther	eas in northeastern	Adams County COZ 011	24 1600MST 0 0 0 Hail (0.75) 3/4 inch hail fell 5 miles northeast of Commerce City.						
013	Major crop damage occurred near County. A 20 mile swath through hit. Corn, onions, potatoes, and damaged, along with 3300 acres o	the tornadoes in Weld north-central Weld was d beans were badly	Jackson County COZ 002	28 144CMST 0 0 0 0 Rain, Hail (0.6) An unusually heavy mountain thunderstorm dropped 1.75 inches of rain in just 30 minutes 2 miles west of Rand, along with hail that piled up 6 to 8 inches deep.						
	worst damage extended from two m Gill. In Fort Morgan, winds bler hangar at the airport. A barrel side of a small plane. Lighthin fire just south of Fort Morgan;	iles east of Eaton to w a door off of a was blown into the g started a pasture	Routt County COZ 001	30 1430MST 0 0 4 0 Rain, Lightni Lightning severely damaged a transformer in Hayden, causing power outage that lasted 10 hours. 1.05 inches of rain fell 30 minutes, causing street flooding.						
	Additional reports associated wit follows:	th these storms were as	Boulder County COZ 011	31 1400MST 0 0 0 0 Hail (0.75) 3/4 inch hail fell 2 miles southwest of Louisville.						
Adams County, 7 N Bennett Weld County:	07 1520MST	Hail (0.75)	Boulder and Jefferson Counties COZ 011	31 1743MST 0 0 0 Rain, Hail (1.0) 1 inch hail fell in Jefferson County at Lakewood. At about the same time Broomfield, in extreme southeast Boulder county, was						
Kersey 2 S Gill 5 SE Grover	07 1555MST 07 1600MST 07 1645MGT	Hail (1.00) Hail (0.75) Hail (1.75)		drenched with 1.25 inches of rain in just 20 minutes.						
2 S Gill Huerfano County:	1645MST 07 1650MST	Hail (0.75)								
Washington County	07 1830MST	Hail (0.75) Hail (1.25)		•						
Akron Sedgwick County, W of Sedgwick	07 1910MST	Hail (0.75)								
Arapahoe County	8 1513MST 0 0	0 0 Hail (1.25)	6 CONNECTIC	ŲΤ						
COZ 012	1½ inch hail fell 3 miles north 8 1630MST 1 0	of Deer Trail.	Hartford County	25 1130EST- 0 0 ? ? Lightning 1200EST A powerful, early afternoon thunderstorm resulted in						
COZ 001 El Paso County	A 16-year-old girl was killed by  8 1643MST 0 0	lightning in Toponas.  O Tstm.wind (61)		A powerful, early atternoon thunderstorm resulted in power outages affecting up to 30,000 homes and businesses in Manchester, East Hartford, Bloomfield, and South Windsor.						
COZ 014	A thunderstorm produced a 61 mph		] ]	"Trudot.						

			JULY 19
PLACE	TTIME - LOCAL STANDARD CROPS SHOWN COPE STANDARD CROPS CROPS SHOWN COPE CROPS	PLACE	STANDARD STANDARD STANDARD STANDARD STANDARD ON WOODE ESTIWATED, DAWAGE OF STANDARD ON
	TICUT	FLORIDA	_!
New London County, North Stonington	25 1330EST- 0 1 ? 0 Lightning 1400EST 0 0 4 3 TSTM Wind (60) 0 0 2 0 Hail	Pasco Co., Zephyrhills	06 1715EST 0 0 3 0 TSIM wind (50) High wind downed power lines and trees.
	In North Stonington, a bolt of lightning injured a woman when it travelled through a washing machine at which she was doing laundry. She was taken to the local hospital.	Hernando Co., Brooksville(1 mi.E)	06 1825EST 1.0 30 0 0 4 0 Tornado (FO) A tornado caused major damage to the roof of a modular home. Several carports were damaged and trees and power lines were downed.
	A thunderstorm downburst wind roared through part of this town as well, knocking down trees, tearing a roof of a building, blowing out windows, and flattening a cornfield. Also, hailstones of up to one-half inch in diameter	Alachua Co., Gainesville	09 1629EST UNK UNK 0 0 0 0 Tornado (FO) A tornado was reported by the observer at Gainesville Airport.
	broke several windows in a home.	Hillsborough Co., Tampa	10 UNK 0 1 0 0 Lightning A 35-year-old male was injured by lightning. The person was on a golf course. It was not raining at the time.
7 DELAWARE	la	St. Lucie Co., Jensen Beach	12 1500EST 0 0 3 0 TSIM wind (55) High wind destroyed a screened porch.
Kent County and Sussex County	12 1210EST 0 0 4 0 Thunderstorm Wind A trailer was blown off of its foundation in Kent County. The heaviest rain fell in New Castle County where 1.7 to 4.7 inches were reported. A thunderstorm	Indian River Co., Fellsmere Highlands Co.,	12 1610EST 1.0 30 0 0 4 0 Tornado (FO)  A tornado did minor damage to 9 homes.  13 1400EST 0 0 3 0 TSTM wind (55)
Sussex County	also dropped dime size hail in Harrington and Greenwood.  19- 9 days 0 0 4 4 Heat Spell 27	Sebring	High wind damaged the roof of several mobile homes and downed trees.
	Temperatures were well into the 90's (°F) for 9 consecutive days and reached 98°F at Wilmington. Many chickens were lost, most at the start of the heat spell. A total of 1 million chickens in the Delmarva Peninsula were reported to have died, a figure somewhat	Putnam Co., Palatka  Broward Co., Ft. Lauderdale	13 1540RST 0 0 3 0 TSIM wind (55)  High wind downed trees and power lines.  13 1630RST 0 0 3 0 TSIM wind (55)
Kent County and Sussex County	above normal. Delmarva Power reported a record usage of 2.228 kilowats.  21 1800EST 0 0 ? 0 Thunderstorm Wind (70)	Palm Beach Co., Boca Raton Palm Beach Co.,	High wind downed trees and power lines.  14 1306EST 1 2 3 0 TSIM wind (55)  14 1320EST 0 1 0 0 TSIM wind (55)
,	Strong thunderstorm winds reached 70 knots at Cape Henlopen Pilot Tower. A dog was picked up and blown through the air in Kent County and trees were knocked over near Greenwood. In Sussex County, winds reached 70 knots in Lewes and hail fell at Fenwick Island. Trees and camping tents were blown over.	Hypolumo Palm Beach Co., Delray Beach	High wind blew over a concrete block wall which killed a 34-year-old male. Lightning struck and killed a 19-year-old woman on the beach. It was not raining at the time. High wind blew a man off a mobile home roof. M340 F190
New Castle County	26 1430EST 0 0 5 0 Thunderstorm wind (57) Thunderstorm winds gusting up to 57 knots damaged 17 aircraft at the Greater Wilmington Airport,	Broward Co., Hallandale	14 1415EST 0 0 2 0 TSTM wind (55) High wind uprooted several large trees.
	flipping over 4 of them.	Brevard Co., Indialantic	14 1600EST 0 0 4 0 TSIM wind (55) High wind caused damage to a nursing home roof and destroyed a patio roof.
		Indian River Co., Vero Beach	14 1633EST 0 0 4 0 TSTM wind (52) High wind destroyed a carport and downed a TV antenna and trees.
	01 1700EST 0 0 3 0 TSIM wind (52)	Pinellas Co., Largo	15 1000EST 0 0 4 0 TSTM wind (55) High wind blew the roof off of part of a storage building and rain damaged the contents.
Englewood  Pasco Co., Anclote	High wind damaged the roofs of two mobile homes.  1 UNK 1 0 0 0 Lightning A 16-year-old male was struck and killed by lightning. The	Pinellas Co., Tarpon Springs	15 1100EST 0 0 5 0 Lightning Lightning started a fire which damaged a house.  18 UNK 0 0 4 0 Lightning
Osceola Co., St.Cloud	person was on a boat ramp. It is not known whether it was raining at the time. M160  02 1711EST 0 0 2 0 TSTM wind (50)	Manatee Co., Longboat Key  Lee Co., Cape Coral	Lightning started a fire which destroyed a 40' long sailboat.  19 1400EST 0 0 3 0 TSIM wind (55)
Nassau Co., Hillard	High wind blew down utility poles and trees.  04 1420EST 1 0 0 0 Lightning  A 74-year-old woman was struck and killed by lightning. The person was outside her home in the garden. It is not known whether it was raining. F740	Bradford Co., Starke (lmi.N)	High wind destroyed a pool screen enclosure and blew a canoe several blocks.  23 1708EST 1.0 30 0 0 2 0 Tornado (FO)  County sheriff's office sighted a tornado which downed power
	04 LNK ' 0 1 0 0 Lightning A 15-year-old male was injured when lightning struck a nearby utility pole.	Columbia Co., Lake City	poles and trees.  23 1725EST 1.0 30 0 0 2 0 Tornado (FO)  County sheriff's office reported a tornado which damaged a mobile home.
Apollo Beach	06 1600EST 0 0 3 0 TSTM wind (55) High wind damaged the slate roof of a house.	Sarasota Co., Sarasota	24 1530EST 0 0 2 0 TSIM wind (50) High wind damaged a patio roof.
	06 1626EST 1.0 30 0 0 5 0 Tormado (FO)  A tornado damaged a flea market and 6 mobile homes. It also did minor damage to 10 other mobile homes. Damage was to roofs, carports, and porches.	Manatee Co., Bradenton	24 1600EST 1.0 30 0 0 2 0 Tornado (FO)  A tornado did minor damage to a home and a boat was blown airboune.

			JULY 198
PLACE	TIME - LOCAL STANDARD LENGTH OF PATH (MILES) WIDTH OF PATH (TARDS) KILLED ROPERTY ROPERTY CROPS CHARACTER OL STANDARD CHARACTER OL S	PLACE	TIME - LOCAL STANDARD LENGTH OF PATH WILLED RILLED
FLORIDA	· ·	GEORGIA	4
Lee Co., Cape Coral	26 1400PST 0 0 3 0 TSTM wind (50)	Greene County	06 1730EST 0 0 ? 0 Tstm Winds Thunderstorm winds downed several trees at scattered locations
Martin Co., Stuart	27 1105EST 0 1 0 0 Lightning	F=+	in the county.
,	A man was injured by lightning. It was not raining at the time.	Emanuel Co, 8W Swainsboro	Two barns and several other farm buildings were destroyed and
Santa Rosa Co., Munson	27 1700EST 0 0 0 0 TSIM wind (50) High wind blew down several trees.		roofs damaged by thunderstorm winds. Several large pecan and pine trees were uprooted. One of the uprooted trees fell on a truck.
Lee Co., Fort Myers	28 1230EST 0 1 0 0 Lightning	Spalding Co, 8N Griffin	06 1845EST 0.75 50 0 0 4 0 Tornado (F1)
	A 13-year-old male was struck by lightning and injured while playing in his backyard. It was not raining at the time.	on dellin	A short-lived tornado touched down just east of Highway 19/41 on the south side of the community of Sunnyside in northern
Volusia Co., Ormond Beach	28 1700EST 0 1 0 0 Lightning A 34-year-old male was struck and injured by lightning		Spaiding County. Trees and power lines were downed along the 3/4 mile long path as it moved southeast. A barn was destroyed, several houses and a store damaged. The roof of a car wash collapsed onto a van. Marble size hai
	while he stood next to a van near the beach. It is not known whether it was raining.	Washington Co, Sandersville	06 1900EST 0 0 ? 0 Tstm. Winds
Santa Rosa Co., Milton	30 1400EST 0 0 3 0 TSTM wind (50) A barn roof was destroyed by high wind and several trees		Thunderstorm winds downed a few trees and power lines in Sandersville.
	were downed.	Randolph County	14 1921EST 0 0 0 0 Rail (0.75) Hail up to 3/4 inch in size fell south of Cuthbert.
		Jefferson County	24 1530EST 0 0 ? 0 Tstm. Winds
9 GEORGIA			Thunderstorm winds downed trees and power lines in Matthews and Zebina. One tree fell on a house.
Statewide	01-31 4 0 0 ? Heat	Toombs Co, Vidalia	24 1715EST 0 0 4 0 Tstm. Winds
	Above normal temperatures were common across Georgia during the month. Hundreds of people were treated for heat-related		Thunderstorm winds downed trees and power lines and damaged roofs of houses and garages in Vidalia.
	illnesses. Four deaths were listed as being due to the heat. Crops in some areas suffered from the lack of rain. The dates, locations, ages and sex of the fatalities are listed below.	Fulton Co, Atlanta	24 1740EST 0 0 4 0 Tstm.Winds (52) 0 1 0 0 Lightning
	7/02/87 Richmond Co, Augusta M62P 7/10/87 Bibb Co, Macon F74P 7/14/87 Muscogee Co, Columbus F82P 7/31/87 Muscogee Co, Columbus M540		Thunderstorms winds gusting to 60 mph flipped a plane at Fulton County Airport. One man at the airport was injured when struck by lightning.
Hall County White County	01 1900EST	Laurens Co, Dublin	24 1800EST 0 0 4 0 Tstm.Winds 'Thunderstorm winds blew the roof off a barn and damaged the roof
miller dealey	Trees and powerlines were blown down by thunderstorm winds near Lake Lanier and in the southeast part of White County.	Hall Co, Gainesville	of a house. Trees and power lines were downed by the storm.  24 1845EST 0 0 4 0 Tstm. Winds
Hall Co, Gainsville	02 1930EST		Thunderstorm winds downed trees, one of which fell on a mobile home, and power lines in Gainesville. Several roofs were damaged
 	Several trees were blown down on the north side of Gainsville. One tree fell on a house and another crushed a car.	7	and a few businesses had water damage from the heavy rain after the winds damaged the roofs.
Gwinnett Co, Snellville	04 2000EST 1 3 0 0 Lightning	Pike Co, Vega	24 1905EST 0 0 ? 0 Tstm.Winds Three houses were damaged by falling trees that were blown down
	Lightning fatally injured a 57-year-old man and injured three others during a gathering at a park in Snellville, M570		by thunderstorm winds in the community of Vega in southeast Pike County.
Habersham Co, Demorest	06 1415EST 0 0 ? 0 Tstm_Winds Thunderstorm winds downed more than 50 trees and damaged a	Bibb Co, Macon	25 1600EST
Hall County	utility shed near Demorest.  06 1630EST 0 0 ? 0 Tstm_Winds		Thunderstorm winds downed trees at scattered locations in Macon.  A window in a showroom was blown out and two people were injured by flying glass. Several cars had minor damage from wind-blown
,	Thunderstorm winds downed trees and power lines in the northern part of Hall County.	Ben Hill County	debris.  25 1600EST 0 0 ? ? Tstm. Winds
Chatham County	06 1653EST 0 0 4 0 Tstm, Winds (51)		Thunderstorm winds downed trees at scattered locations in the east half of the county. The most damage was in Fitzgerald.
	Thunderstorm winds gusted to 59 mph at the Savannah Airport. Trees were downed in Garden City, Pooler, southern Savannah, and Isle of Hope and Skidaway Island. One tree fell on the roof of a bones and caused \$5 ONG damage	Fulton Co, Atlanta	25 1630EST 0 0 4 0 Tstm. Winds
Cherokee County	house and caused \$5,000 damage.  06 1700EST 0 1 0 0 Lightning		Thunderstorm winds downed several trees in the Virginia-Highland area of Atlanta. A bus was damaged by one of the falling trees.
	An 87-year-old woman was injured when struck by lightning in the northeast part of Cherokee County.	Fayette County	25 1900EST 0 0 4 0 Tatm.Winds
Oconee County	06 1703EST 0 0 ? 0 Tstm. Winds		Numerous large trees were downed in Peachtree City. One tree fell on a house.
	Roofs were damaged in the southeast part of Oconee County by thunderstorm winds.	Muscogee Co, Columbus	25 2108EST 0 0 ? 0 Tstm.Winds Thunderstorm winds downed trees on power lines and blocked a
Fulton Co, Roswell Fulton Co, Atlanta	06 1720EST	Fulton and Gwinnett	road in Columbus. Quarter-inch hail fell from the storm.
Clayton County	06 1800EST 0 2 0 0 Lightning	Counties	Thunderstorm winds downed trees and power lines at scattered
	Two workers were injured at Martafield Airport when the aircraft they were working on was struck by lightning. A house in Atlanta was heavily damaged by fire after being struck by lightning. Golfball size hail fell in Roswell.		locations across Gwinnett and northern Fulton counties. A chicken house was flattened by the winds near Dacula.

		<del></del>											,	,		, .		JULY 1987
	OCAL	PATH	ATH T	NO. PERS		STIMA DAMA		CHARACTER			CAL	PATH	PATH 3)		OF SONS		ATED!	CHARACTER
PLACE	DATE TIME - LOCAL STANDARD	LENGTH OF (MILES)	WIDTH OF PATH (YARDS)	KILLED	INJURED	PROPERTY	CROPS	OF STORM	PLACE	DATE	TIME - LOCAL STANDARD	LENGTH OF (MILES)	WIDTH OF PATH (YARDS)	מורובם	INJURED	PROPERTY	CROPS	OF STORM
GEORGIA	4								GEORGIA	\ \								
White Co, 10 SE Cleveland							lnes w	Tstm. Winds	Baldwin Co, 5SE Milledgeville	Thu	2130EST nderstorm	winds	uproc	0 ted i	0 a fe	? ew tre		Tstm. Winds
Habersham County	26 1540EST			1	3	0	0	Creek Community.  Lightning  killed and three	Stephens Co, Toccoa	30	2010EST			0	0	?		Tetm. Winds
		red min	or inj	ures	when	stru	ick b	y lightning. The		į Inur	iderstorm	WINGS (	lowied	LLees	anu	power	IINES .	n Toccoa.
Hall Co, 15W Cornelia		trese		0 .	0	?		Tstm. Winds	10 IDAHO									
Rabum County Rabum Co, 6NE Clayton	miles west of 27 1417EST		a.	0	0	?	0	Tstm. Winds	Power County, Fairview and Funk Road area		2030MST power p	oles sn	apped,	0 and to	0 wo t1	3 ransfor		TSTM Wind
Rabble co, the clayeon	Thunderstorm of Rabun Cour		downed	tree	in th	e ext	reme	northeast corner miles northeast	Caribou County,	16	2000MST			0	0	4	4	TSTM Wind, Flash Flood
Upson Co, 3N Thomaston	of Clayton. 27 1530EST			0 .	0	4	0	Tstm. Winds			vy <b>rai</b> ns . Black Ca							crop damage, and
	mile area no	orth of cars. S	Thoma ix hom	iston ies i	. Seve	ral	of t	over a 5 square the trees fell on 3 cars crushed.	Blaine County, Galena Summit		early morning	of spor	fell -	0 n Gal	0 ena <sup>6</sup>	O Summir	0 (8700	Heavy Snow ft.) which
Mitchell Co, Baconton		ss were		0 0	0	3		Tstm.Winds Hail (0.75)		str	anded mot t snow pl	orists.	It wa	s the	fire	st time	e in at	least 28 years
•		ction :						down a building	Custer County, Sawmill Canyon	18 Sev	1000MST	1.0 ighty t	20	one 2	feet	3 t in di	4 Lameter	Tornado (F1)
Rockdale Co, Conyers Newton County	27 1930EST 27 1945EST			0	0	4 ?		Tstm. Winds Tstm. Winds	Chackers Cr	but	there we	re many	campgro fright	ened 0	No de campe	eaths ers.		uries occurred,
	adjacent hall	lways ai : suffer Ines wer	t Rock red wa re d	dale iter ( lowne	County iamage	High from	Scho the h	O classrooms and col. School books meavy rain. Trees cocations in both	Shoshone County, Smelterville Bingham County,	Two due	1630MST feet of to heavy 1700MST	water, rains	mud, at and tui	d deb	ris :	spille own in	d out o	f Grouse Creek o-foot-deep lake.  TSTM Wind
Dougherty Co, Albany	28 1600EST			0	0	?	0	Tstm. Winds	Springfield	Į.			ed a mo					its roof.
	west and sou airport in All	ithwest i	sides o	f All				wer lines on the to 53 mph at the	Shoshone County, 8 E Avery				n apar	2 : by v	0 iole:			TSTM Wind
Ware Co, Hoboken Ware County	28 1930EST 28 1930EST Lightning cau	ısed a		0 0 hat o	0 0 damaged	4 ? ach	0	Lightning Tstm. Winds in Hoboken, and a	Lincoln County, 4 N Richfield	21	1945MST	?	?	0	0	4	5	Tornado (F1), Hail, TSTM Wind
		nd power	r line	s w	ere do	wned	in W	aycross. Several		Root	s were b	lown of	f of tw	o barı	is an	d brok	en gla	gin and hay fields. ss was embedded ne window at the
Dooly Co, Vienna	29 1550EST Ping pong ba falling just	ll size	hail fe	0 ell i	0 .n Vienr	? na wii		Hail (1.75) lf ball size hail		Brau		irm. O	ne farm	er los	st 30	chick	ens wh	en they amothered
Terrell Co, Dawson	29 1600EST	east Of	, renna.	0 0	0	?	?	Hail (0.75) Tstm.Winds	Bonner County, Harrison; and Kootenai County, Spirit Lake and									Hail (1.00), TSTM Wind minor road
	Nickel size thunderstorm							were downed by e of Dawson.	Coeur d' Alene	was	flooded a	ılso.	ine ba					Alene library
Jeff Davis Co, 10SE Hazlehurst			downed		es and		wer 1	Tstm.Winds	Bannock County, South of Inkom	1	1635MST er Creek		outh of	0 Inkor	0 n was	3 close		Flash Flood to flooding.
Appling & Jeff Davis Counties, 12SW Baxley	,	0.1	50	0	0	4	4	Tornado (F1)	Jefferson County, Hamer	28 Hai:	1700MST	and bea	vy rain	0 produ	0 iced	0 extens		Hail (0.50), TSTM Wind op damage. The
	county line. a travel tr	Two mo ailer w d or b	bile ho ere hea roken	omes avily off	were de damage along	estroy ed. Ap the	yed. pprox path	oppling Jeff Davis A mobile home and imately 100 trees . Several utility the area.	Lehmi County, between Leadore	29		lasted	20 min	utes a	and p	roduce 0	d 1.25 O	inches of rain.
Lowndes County	29 1900EST	Ŭ-		0		3		Tstm. Winds, Hail (1.00)	and Gilmore Power County,		1350MST	- h-12	0	. 0	0	4		Flash Flood
	tobacco and	blew d ty. Two	own sev buildi	veral ings	pecan	trees	s in 1	pout 25 fields of the northern part nd several others	Rockland	A ti	undersho	inches	in 50	.2 in:	ches es at	: Rock1	n in 3	O minutes and a House Canyon Road ments were flooded.
Wilkinson Co, Gordon Twiggs County	29 2115EST 29 2130EST			0	0	?	0	Tstm. Winds Tstm. Winds	Ada County, Boise	A se	1618MST evere thur es and fer				0 exter	3 nsive p		TSTM Wind (62) utages, and some
	Thunderstorms part of Twigg							s in the eastern asom County.	Bonneville County, 10 NE Idaho Falls	29	1854MST		•	0	0	0	0	Funnel Cloud
		•							Valley County, 30 N McCall	29	2025MST			0	0	0	0	Funnel Cloud

			JULI 1707
PLACE	TIME - LOCAL STANDARD.  LENGTH OF PATH (MLES) WIDTH OF PATH (YARDS) MILLED CROPS CRO	PLACE	TIME - LOCAL STANDARD CHOCTH OF PATH (VARDS) WILLED CROPS RILED (MILES) WIDTH OF PATH (VARDS) CROPS CR
II ILLINOIS		ILLINOIS	
Southern Third of Illinois	05 1200- 1 1 5 ? Tstm.wind (52) 1510CST Thunderstorms moved from west to east across the south third of	<b>К</b> пох Со.	06 1618CST .1 20 0 0 3 ? Tornado (F1) A small tornado touched down briefly at Knox County Road 19 and the Interstate 74 bridge, causing \$1500 damage to a corn bin.
,	the state, producing 40 to 60 mph winds over the entire area. Tree damage was widespread, and it was reported in each of the 29 southern-most counties of the state. Practically every community in the area reported at least a few roads blocked by fallen trees. A motorcyclist was injured when he crashed into a fallen tree in Mt. Carmel (Wabash Co.). A rural Anna (Upion Co.) woman was killed when struck on the head by a large tree limb. Tstm.wind F460	Shelby Ca.	06 1705CST 0 0 5 4 Tstm.wind (70) Exceptionally strong thunderstorm winds, estimated at 80 mph, caused much damage across the county. Findley had 70 mph winds and considerable structural damage, estimated at \$300,000 in the town. The Findley Marina experienced 80 mph winds which caused \$100,000 damage. Winds also flattened \$50,000 worth of crops in surrounding farm areas.
Franklin Co, West Frankiort	06 0430- 0 0 3 0 Flash flood 0535CST Five and one-half inches of rain fell in the area in the two hours ending at 0500CST, causing flooding in the "Big Ditch" area of town.	Effingham Co,	06 1721CST 0 0 4 4 Tstm.wind (70) High winds raked the county. Carlinville experienced tree damage and power outages, and farms in the area reported shed damage. A radio station measured a wind gust to 80 mph.
St. Clair Co	06 1035- 0 0 7 5 Hail (3.5) 1105CST Huge hailstones crashed down, and damage to property and larm	Moultrie Co.	06 1730CST 0 0 4 ? Tstm wind Thunderstorm winds toppled several trees and damaged rural out- structures, mainly across the weat half of the county.
	crops totaled 14 million dollars. Communities such as Belleville, Cahokia, Freeburg and Millstadt reported devastation. Hallstones i to 2 inches in diameter covered the ground to a depth of several inches at many locations. Trees were stripped of their leaves, crops in fields were smashed, and in some fields the hallstones actually produced small impact craters. At a rural location J Millstadt, hallstones were measured at 3 1/2 inches in diameter.	Edgar, Clark, and Coles Counties	06 1755- 0 0 4 ? Tstm.wind (72) 1855CST Thunderstorms winds caused widespread tree and minor property damage. The communities of Farla (Edgar Co.), Cleone (Clark Co.), and Charleston (Coles Co.) sustained much tree and property damage. Winds were measured at 83 mph at the Coles County Airport.
	Insurance adjusters processed \$9,000,000 in claims for damaged automobiles 19000 cars with average damage of \$1000 apiecel and \$4,500,000 in claims for damaged houses (3000 houses with average damage of \$1500 each). In the aftermath of the storm, every automobile dealership in the Belleville area was advertising special sales on half-damaged vehicles.	Jackson Co. St. Clair Co, East St. Louis	07 0015CST 0 0 5 0 Lightning A lightning-caused fire destroyed a house.  07 1400CST 0 0 2 0 Lightning Lightning disabled a water sumping station, and E. St. Louis
Wayne Co.	06 1255CST 0 0 4 ? Tstm.wind 1315CST 0 0 ? ? Hail (.75) 1255- 0 0 4 0 Lightning 1125CST	Carroll Co, Milledgeville	residents had no water for 4 hours.  08 1745CST
	A severe thunderstorm caused considerable damage to trees and power lines, especially in the vicinity of Fairfield. Lightning started 6 fires.	Ogle Co, Byron	injured a girl, age 9, on a softhall field.  OB 1840CST
Wayne and Marion Counties	06 1240- 0 0 4 3 Tstm.wind 1315CST 0 0 5 4 Hail (1.25) 1315CST	Macon Co.	09 1100CST 0 0 4 ? Tstm.wind High winds downed trees at several locations across the county, but damage was centered at Decatur.
	1240- 5 0 Lightning 1330CST In Wayne Co., lightning sparked three oil storage tank fires, and several houses were damaged by large hail at Wamac. In Marion Co., 1 1/2 inch hail damaged 6 houses at Centralia, and a combination of wind and hail flattened corn and beam crops in the area.	Grundy Co, Minooka	09 1910- 0 Q 4 ? Flash Flood 2010CST Four to 5 inches of rain poured down in one hour, resulting in considerable street and basement flooding. This storm occurred in association with a funnel cloud.
Edwards Co. Albion	06 1330CST 0 0 3 0 Tstm.wind Winds toppled power lines and large trees.	Grundy Co, Morris area	09 1920CST 0 0 0 Funnel cloud A well-formed-funnel cloud was tracked from northern Morris in the area of Lisbon Road and Interstate 60 to the intersection of U.S. Route 6 and Ashley Road, a few miles to the east.
Wabash Co, Mt. Carmel	06 1330- 0 4 ? Tstm.wind (53) 1350CST Winds brought down large trees, resulting in power outages across large areas of town. Four utility poles toppled, and one automobile was crushed by a large tree. Damage was estimated at \$55,000.	Adams Co, Quincy	10 1310CST 0 0 4 ? Tstm.wind {44} 40 to 50 mph winds toppled several trees and damaged sheds in the area. 800 electric utility customers lost power for a few hours.
Stephenson and Winnebago Counties	06 1330- 0 0 5 ? Tstm,wind (57) 1434CST 45 to 65 mph winds swept across the area, resulting in widespread structural and tree damage. 65 mph winds lifted the roof of the J. Rubin Service Company in Rockford.	Richland Co, Glney	10 2030CST 0 0 4 ? Tstm.wind 2030CST Funnel cloud 2057CST 0 0 3 ? Hail (.75) Winds toppled many trees and caused power outages. A few large hail stones also fell.
Adams and Pike Counties	06 1501- 0 0 3 ? Tstm.wind 1530CST	Madison Co, Troy	14 PM 0 0 4 0 Tstm wind Winds toppled many large trees in Troy, and areas several miles to the south. Trees blocked roads and gulled down power lines in rural areas.
Macoupin Cc.	06 1500- 0 0 4 9 Tstm.wind 1545CST 0 0 4 4 Hail (1.5) 1540CST 0 0 4 4 Hail (1.5) Winds estimated at 65 mph toppled many large trees. Barnett had 1 1/2 inch hail.	Iroquois Co, i S Donovan	i5 1420CST 1/4 ? 0 0 4 3 Tormado (Fi)  A tormado touched down on the farm of Randie Orr, destroying several structures and injuring one cow. Some damage also occurred to mearby field crops.
Madison and St. Clair Counties	06 1520- 1555CST A second severe thunderstorm moved across areas which only 5 hours earlier were struck by a savage hallstorm (see entry for St. Clair Co.at 1035CST). Winds often in excess of 45 mph toppled trees and utility poles across the two counties. At Barts Airport (in St. Clair Co.) winds were measured at 69 mph.	Champaign and Vermilion Counties Stephenson and Winnebago Counties	15 1420- 0 0 3 0 Tstm.wind (63) 1520CS7 Thunderstorm winds downed trees across central sections of the counties. Winds gusted to 73 mph at the Champaign County Airport. 20 1750- 0 0 3 0 Tstm.wind (40) 1830CST
Montgomery Co.	06 1545- 0 0 4 ? Tstm.wind 0 1630CST 0 0 9 4 ? Hail (2.00) Litchfield, hardest hit among many areas reporting wind and hail damage across the county, experienced many downed trees and power	Franklin Co, Benton	Scattered minor damage occurred across rural north portions of the counties.  23 1350- 0 0 3 0 Tstm.wind
Wayne Co, Fairfield	of 1605CST 0 0 5 ? Tatm.wind (55)  A second severe thunderstorm to strike the area on the same day, winds tore a 30,000 square foot roof off the Airtex Products Co. plant.		1430CST 0 0 0 Funnel cloud High winds coupled with heavy rain caused some damage in town. Street flooding was common. Many residents observed a funnel cloud.

			JULY 1987
	NO. OF ESTIMATED! PERSONS DAMAGE		NO. OF ESTIMATED DAMAGE
PLACE	TIME - LOCAL STANDARD LENGTH OF PATH (YARDS) MIDTH OF PATH (YARDS) MINURED CROPS CRO	MARACTER OF PLACE STORM	TIME - LOCAL STANDARD - LOCAL CROSS - LOCAL STANDARD - LOCAL CROSS - LOCAL STANDARD - LOCAL
ILLINOIS		ILLÍNO	
Shelby Co, Stewardson and Strasburg	25 night 0 0 4 0 Tstm.v Winds toppled trees and power lines in the area. A fr. under construction was destroyed.	2 HE New Boston	30 1700CST .2 narrow 0 0 4 ? Tornado (F1) A tornado destroyed 3 barns and a wash house, and damaged a farm house.
Stephenson Co, Freeport Winnebago Co.	26 1435CST 0 0 0 0 Hail	Peoria and Taxewell Counties, Pekin	Thunderstorm winds estimated at 60 mph toppied large trees in and around Pekin. One house was so badly damaged by a large fallen
Boone Co	1605CST 0 0 5 2 Hall 0 0 3 2 Tsus.	(1.25) Wind (57) Entire State wind (52)	tree that it was rendered uniphabitable.  1-31 6 0 6 Heatwave July was an excessively hot and dry month. In addition, persistently high humidities added to the discomfort. Although
	1625CST 1600- 0 0 4 ? Hail 1625CST 45 to 65 mph winds, accompanied at times by 1 1/2 inch across the counties, resulting in widespread damage. Y toppled several large signs in southeastern Rockford. (measured at 60 mph at the Rockford Airport) tore a lad of roof off a Howard Johnson's Motor Lodge in Rockford home was also damaged by a felled tree.	(1.5) hail, tore Winds Winds rge portion	scattered thunderstorms brought sufficient rain to some places, most areas experienced little signigicant rain from June 20 to July 23. Corn was stressed by heat and insufficient moisture, and the statewide yield was expected to be reduced by about one million dollars. Six metropolitan Chicago deaths were directly attributed to heat. One of the deaths occurred in a closed can in bright sun, 2 in closed and overheated apartments, 3 from overly strenuous outdoor activities. Heat MMSO, MMSO, MESO, MSSO, MSSO, MSSO.
McHenry Co.	26 1615- 1640CST Scattered large hail tell across the county, accompanis 40 mph winds. Most hail was less than one inch in dia few stones measured 2 inches across in southeastern po- the county, where windows were broken and aluminum-sid were dented. 1 1/2 inch hailstones also fell at Algon	ed by 30 to meter, but a rtions of ed buildings	
Kane Co	26 1627CST 0 0 ? ? Hail	(1.75) 12 INDIANA	
Coles, Moultrie, and Cumberland Counties	26 1630CST 0 0 4 ? Tatm. Winds estimated conservatively at 65 mph knocked out e to large sections of Mattoon and Oakland (Coles Col, an areas of Moultrie and Cumberland counties. One 1966 c. crushed by the trumk of a fallen tree that was 9 feet	d in rural   West-Central and ar was   Central Indiana	i 1898 to 2 1 ? ? Flash Flood
Clinton Co.	26 1930CST 0 0 4 0 Tstm. Winds toppled trees and caused widespread power outage: especially in Carlyle and eastern Clinton County. The Boat Marina suffered considerable damage.	wind (59) s,	1400 EST  A winterlike storm system drenched central Indiana, dropping 4 to 5 inches of rain over much of the area. In Indianapolis the heavy rain set off flash flooding that caused 2 deaths, flooded streets
Coles Co.	27 i050- 0 0 3 0 Tstm.t i125CST Winds up to 63 mph toppled trees and power lines at man locations. Tree and electric utility damage was report Coles Station, Mattoon and Charleston.	ny county ted from	and roads, and disrupted businesses. MISO, MI4O Elsewhere across central Indiana many creeks and small streams were out of their banks, numerous county roads were closed due to high water, and one bridge was closed.
Gallatin and Saline Counties	27 1430- 0 0 4 0 Tstm-1 1515CST Winds toppied several large trees onto houses, causing considerable structural damage in Harrisburg, Equality, and Eldorado. Two large trees struck the home of Mrs. Abell in Eldgway with such force that several holes we in the roof and prisms were knocked from a living room	Ridgway Catherine re punched   Warrick Co,	4 8521 EST 8 8 5 8 Lightning Lightning set fire to the Teagarder Building in Hartford City and caused \$388,800 in damage.
Clay Co, Flora	28 1705CST 0 0 4 0 Tstm. Thunderstorm winds estimated to be in excess of 60 mph trees and caused power outages.	Wind	Strong thunderstorm winds downed trees and power lines and tore aluminum siding off a house.
Adams Co, Niekamp Corner	29 CO50CST 0 0 4 0 Tstm.v A small area of high winds estimated at 60 mph damaged garage. A small car was pushed 30 feet along a drivew:	a house and	5 1617 EST 8 8 8 8 TSTN Wind Strong thunderstore winds downed trees, power lines, and an awning.
Bureau and Henry Counties	29 1415CST 0 0 3 0 Tatm-v	Dubois Co:	5 1648 EST 8 0 ? 8 TSTM Wind 5 1789 EST 6 8 ? 0 TSTM Wind
Bock Island Co, Port Byron	29 1505CST .75 ? 0 0 3 ? Tornad A tornado moved through two farms in rural Port Byron i Boute 2. The tornado cut an erratic path, including a U turn which spared a house owned by Richard *Pinky* 71	near Old fortuitous	Strong thunderstore winds downed trees, power lines, and a barn in Holland. In Huntingburg large trees were blown down on a restaurant.
Enox Co, Galesburg	29 1605CST 0 0 4 4 Tatm. 1605— 0 0 4 4 Hail 1605CST Winds estimated at 60 mph, combined with hail as large aballs, caused considerable damage across the southwest atoms.	wind (1.25)  as golf section of Perry Co,	5 1788 EST 6 0 8 0 TSTH Wind 5 1715 EST 8 8 0 0 TSTH Wind Strong thunderstorn winds downed trees and power lines.
Adams Co, Quincy	29 1730CST 0 0 0 0 7stm.v Winds measured at 74 mph at the Quincy Airport caused s other than a few trees down.	wind (64) no damage	5 1718 EST 0 0 0 8 TSTM Wind Strong thunderstora winds downed trees. Wind speeds of 3B to 48 aph were reported.
Cook Co, Chicago Heights	29 1745CST 0 30 0 0 Lightr Spectators at a basketball game were exiting the field gates in a metal fence when lightning struck a tree and jumped to the fence. Thirty people were injured, 2 ser Some of the people were knocked 4 to 5 feet.	through 1 then	5 1718 EST 8 . 8 8 TSTM Wind Strong thunderstorm winds downed trees.
	of the people west absorbed 4 to 3 feet.	near Huntingburg	S 1725 EST & 0 ? 0 TSIM Wind Strong thunderstora winds tore the porch loose from a house.

	$\overline{}$			-	_				1	7	_	I	T	1	1				
		OCAL	NO. OF ESTIMATED PERSONS DAMAGE  CHARACTER .							OCAL.	PATH	Ħ,	NO. PER		ESTIM. DAM		CHARACTER		
PLACE	DATE	TIME - LOCAL STANDARD	LENGTH OF (MILES)	WIDTH OF PAT (YARDS)	KILLED	INJURED	PROPERTY	CROPS	OF STORM	PLACE	DATE	TIME - LOCAL STANDARD	LENGTH OF I	WIDTH OF PATH (YARDS)	KILLED	INJURED	PROPERTY	CROPS	OF STORM
INDIAN	Δ								<del></del>	INDIAN	Α						•	•	
Harrison County	Forty along Trees of th Numer along	to fifty with smale and power the downed cous trees with tele-	ll hail r lines trees a were d ephone were re	6 mil were nd pow own in poles. ported	es so blown er li the	uth of down nes h	of Corr with locki of Co	ydon. 75% ng road rydon,		INZOS West-Central Indiana	the their	early more banks, sincy in i by rapid njured.	ning ho causing Owen Co ly flow Many s	urs. S numero unty, a ing wat treets	mall of us high small of small	reeks ph wat pict ut nei usemer	s in the ter si kup wa ither o nts we	-centro he are: tuation as swep of its re flo	Flash Flood  al Indiana durin a ran out of ns in low areas. pt off a county two passengers oded throughout
Harrison County ,	1	1630 CST				n	4	0	Tornado (FO)	Rush Co.	the	srea, and	in Ter	re Haut	e 3 ho	mes t	had fi	rst fle	oor flooding.
Harrison County ,						•		_	TOTHAGO (FO)	Milroy	6	1130 EST			9	0	8	8	TSTM Wind
	Harri Coryd trail of th small and d Trees blown near eyewi the t	all mini to son County on. The ro er. An ey e ground a er trailer amaged the at the sa about. On the traile tness to ornado bou	y Forre of was ewitnes nd move The l smalle me loca e man w r that the sma	st, lo lifted ss saw four lifted er one stion was blo was de all to	cated off the f feet trail that were f own up	of a trail nort ler with b snapp paga yed, b repo	lles w 12 X er lif h into as des lew ir ed off inst a ut was rted s	est of 65 foot t off anoth troyed to. and fan uninje	er ,	Greene Co: Linton Owensburg 1W Bloomfield Linton	Road	3 and so: 1455 EST 1510 EST 1530 EST 1530 EST	uth of	State R	6 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	1 B B B	ar Mili 2 8 3 ?	e e e e e e e e e e e e e e e e e e e	Indiana State Lightning Hail (1.75) ISTH Wind Flood ck by hen a tree fell
Orange County	05 A mi	stick. 1630 CST ni tornado acli in a ntered. So	brief] wooded	ly tou	ched o	down s wer	e twis	ted an		Gibson Co,	on ti were had	ne truck   downed i	he was n Bloom ity str	driving field. eets an	just Flasi d num	west floor	of Bl oding count	comfie: in and y road:	ld. Dther trees around Linton s under water.
Daviess Co, Plainville and		ling.	01		<b>a</b>	а.	a		TSTM Wind	Francisco	Stra	1500 EST ng thunde ged a mob	rstarm	winds d	Ø lowned	8 pawer	? r line		TSTM Wind large trees and
Washington	1	ng thunder	storm w	inds (	lawned	d som	e larg		s and uprooted	Warrick Co, Chandler .	6 Stro	1525 EST		winds d	g nwoed	0	-0 rlina		TSTM Wind
Martin Co, Shoals	5 Stro also	1733 EST ng thunder uprooted	storm w some tr	inds (	D Iowned	Ø i boti	Ø h powe		TSTM Wind	Pike Co, Minslow	6	1530 EST	•		9	0	9	8	TSTM Wind
Floyd County	Trees	1645 CST and power ay 111 and			0 blown	0 down	2 1, blo	0 king	Thunderstorm Winds	Orange County	Ì	1500 CS1 s were bl		wn thro	0 ughout	0 the	2 county	0	Thunderstorm Winds
Washington County	05 Trees	1645 CST and power ington Cour	r lines		0 blown	0 down	2 thro	0 ughout	Thunderstorm Winds	Orange County  Washington County	Tree dama	1509 CST s were re ge to one 1510 CST	ported mobil					0	Thunderstorm Winds Thunderstorm
Monroe Co, Stanford	5 Strai	1750 EST	Storm w	inds c	g lowned	0 ! tre:	0 es.	Ð	TSTM Wind	,	Tree the	s and pow county. F reported	ver lin	of wat	er, up	to t	en inc	hes,	Winds
Clark County	Thun	1700 CST							Thunderstorm Winds	Dubois Co, Jasper .	6 Strn	1618 EST		winds	g Spened	8 0	0 r line		TSTM Wind
	pump:	aluminum c s at the C l East.								Ha-bi							-		-
Scott County	05 Trees	1709 CST s and powe t County. Austin are	Damage	was mo	st co	ncen			Thunderstorm Winds	Washington County Harrison County	A fu	1517 CST nnel clou 1530 CST	ıd was	sighted	0 1/2 m 0	o ille m O	0 north o	0 of Sale 0	Funnel Cloud  Em.  Thunderstorm Winds
Clark County	05 Trees	1715 CST s and powe hern Clark ersonville	r lines County	were	0 blown	0 1 down	ated n	ear	Thunderstorm Winds	Scott County	06 Hail	1535 CST	r I three	-quarte	0 rs inc	0 h 1n	2 diamet	0	Hail (1.75)
Washington County	05 Tree:	widesprea 1715 CST s and powe	d. r lines	were	0 blow	0 1 down	2 n,bloc	0	Thunderstorm Winds pads	Floyd County	06 Tree	1540 CST s and pov resulting	r ver lin	es were	0. down	0 in th	2 ne Floy		Thunderstorm Winds
Jefferson County	05	Salem. Po 1720 CST derstorm w			0	0	2	0 the	Thunderstorm Winds	Clark County	06 Tree	1540 CS7 s and pow g with a he city w	ver lin few te	es were lephone	0 blown poles	0 down	2 n in Ch	0 narlest	

PLACE	TIME - LOCAL STANTON S	PLACE	TINE - LOCAL STANDARD STANDARD STANDARD STANDARD STANDARD (MILES) ON WO OF ESTIWATED, DESONA CROPS ON WO OF ESTIWATED, OLOCAL STANDARD OLOCAL OLOCAL STANDARD CHARACTER OF STANDARD OLOCAL OLOC
INDIAN	<del></del>	INDIAN	
Floyd County	06   1542 CST	Allen Co, Monraeville	6 2240 EST short narrow 0 0 3 0 Tornado (F1)
	Numerous trees were blown down in New Albany and dozens of trees were reported down one mile northeast of New Albanywith tops of trees sheared off.  Vehicle damage was reported as a result of trees falling on top of them.		An Fl tornado touthed down briefly 25 miles north of Monroeville, blowing down 6 trees as large as 2 feet in diameter and flattening road signs. Witnesses reported hearing a roar, and a funnel was seen briefly touching the ground. Large hail was also reported just prior to tornado touchdown.
Clark County	06 1545 CST 0 0 3 0 Thunderstorm	Knox Co, Westohalia and	B 1145 EST 2 8 8 8 Flash Flood
	Trees were uprooted in Jeffersonville. Large limbs were sheared off of trees. Live power lines rested in city strees, blocking traffic. Utility poles snapped. Trees blocked rondways. Eail, 3/4 inch in diameter, also fell.	Sicknell	Thunderstorms containing heavy rain caused flash flooding which closed Highway 139 near Westphalia and Bicknell.
Clark County	06 1545 CST 0 0 2 0 Thunderstorm	Harrison County	11 1118 CST 0 0 2 0 Thunderstorm Winds
	Trees were blown down in Clarksville and reported as lying in the same direction. 80 MPH wind speeds were recorded in Clarksville, along with 1/4 inch bail.	Switzerland Co.	Trees were blown down over the southern part of Harrison County.
Clark County	06 1550 CST	SATELECT BILL CO.	Indiana State Police at Versailles relayed a report of tree
	Winds Telephone poles snapped and power lines blew down in Utica. The entire city of Utica was without	Miami Co,	damage in Switzerland County. No specific location was given.
1-66	electrical power or telephone service.	2S Brissom AFB	12 1848 EST 0 0 0 8 TSTM Wind
Jefferson County	Winds Trees fell on a house in Hanover, severely	Wabash Co,	Strong thunderstorm winds downed trees.
	damaging it. Trees and power lines were blown down throughout Jefferson County.	Lafontaine	12 1907 EST 8 2 3 2 TSTM Wind  A number of reports were received of trees down over southern
Newton Ca: Marocca 5E Marocca ISM Kents	1802 to 6 1817 EST 0.9 250 0 3 6 ? Tornado (F2) 6 1820 EST 0 0 0 0 Mail (1.75) 6 1822 EST 0 0 0 7 Mail (1.75) A strong eini-tornado touched down about 1/2 mile west of Morocco in a field. Initially its width was 100 yards and its intensity was F1. As the tornado noved into Morocco, its midth increased to about 250 yards and its intensity reached the lower end of F2. The tornado ascended back into the cloud base at approximately 1817 EST, before leaving the town of Morocco. A total of 16 hones	Marion Co, Indianapolis	Nabash County from 1845 EST to 1938 EST. Trees were reported blocking the road at several locations, and a tree was reported down on a house in Lafontaine. Garden damage was also reported in Lafontaine.  12 2115 EST
	and 4 mobile homes sustained some degree of damage, and 3 people were injured. Large hail fell to the east of Morocco and to the northeast near Kents.	Morgan Co, 19E Mooresville	12 2115 EST 8 8 8 0 TSTM Wind Strong thunderstorn winds downed 2 trees.
White Co, Reynolds	6 1858 EST	Lawrence Co.	12 2135 EST 0 0 8 0 TSTM Wind
	Strong thunderstora winds downed numerous trees.		Frees were blown down in Lawrence County at 4 locations.
Vigo Co, Prairieton Vermillion Co, Centenary Parke Co, Rockville	6 1923 EST 8 8 8 8 TSTM Wind 6 1935 EST 8 8 8 TSTM Wind 6 1945 EST 8 8 9 * TSTM Wind Strong thunderstora winds downed trees in Rockville, Mecca,	Vermillion Co: Blanford Clinton	15 1528 EST short narrow 8 8 3 8 Tornado (F1) 15 1526 EST 8 8 8 8 Hail (1.75)  Hail up to golf ball size covered the ground at Clinton. A pilot reported a tornado touchdown at Blanford. State Police reported damage in one block of the town. Trees and tree limbs were down, and a the roof of a house was damaged.
	Montezuma, Rosedale, Centenary, and Praireton.	Brown Co, Nashville	15 1610 EST 0 0 0 8 Hail (Q.75)
White Co, Wolcott	6 1941-EST 0 0 0 0 TSTM Wind	Jackson Co, 1E Seysour	15 1652 EST
INZ000 West-Central Indiana	Strong thunderstora winds downed numerous trees.  6 1958 EST 8 0 ? ? Flash Flood		Marble to golf ball size hall covered U.S. Highway 50 east of Seymour. Some crops were damaged by the hail. A fallen tree blocked State Road II south of Seymour.
	A television weathercaster reported Otter Dreek was out of its	Cass Co, Georgetown	15 1726 EST short narrow 0 0 2 0 Tornado (FQ)
	banks. High water caused some evacuations at the Elm Grove Trailer Park in Terre Haute. Old U.S. 41 in Parke and Vigo Counties was impassable. Big Raccoon Lake in Parke County was flooding.		Multiple funnel clouds were sighted at Indiana State Road 24 at Georgetown with a brief touchdown reported by the County Sheriff. No damage was reported.
Carroll Co, Delphi	6 2009 EST Q Q B B TSTM Wind	Huntington Co, Warren	26 1525 EST 8 8 3 8 TSTM Wind
Case Co	State Road 25 just northeast of Delphi.	Jay Co.	Strong thunderstorm winds downed trees and power lines.
Eass Co, Logansport	6 2838 EST 0 8 3 8 TSTM Wind	Portland	26 1558 EST B 8 3 6 TSTM Wind
	Strong thunderstorm winds caused widespread power outages; and extensive damage to vehicles resulted from fallen trees.		Power lines and limbs up to 4 inches in diameter were reported down near Portland.
•	1	Tipton Co, 3E Windfall	26 1686 EST 0 0 0 Hail (0.75)

PLACE	DATE  TIME - LOCAL STANDARD ST	PLACE  PLOCAL  TIME  PO O. O. O. D. ESTIMATED  PROPER  TO CAR  TO CAR
INDIAN	Α	INDIANA
Union Co, College Corner	26 1724 EST 0 0 0 TSTM Wand	Washington County
and Liberty Marion Co:	Strong thunderstorm winds downed trees.	Trees were blown down throughout the county, most numerous near Salem and in Fredricksburg. 56 MPH winds were recorded north of Salem.
West Newton Beech Grove Shelby Co, Brookfield	26	Harrison County 27 1412- 0 0 2 0 Thunderstorm 1430 CST
Johnson Co: Rocklane	26 1880 EST 0 0 0 TSTM Wind	Trees and power lines were blown down near Palmyra.  Floyd County 27 1430 CST 0 0 2 0 Thunderstorm
Nineveh Bartholomew Co, Hope	26 1835 EST 0 0 0 0 TSTM Wind 26 1835 EST 0 0 0 0 TSTM Wind	Numerous trees and power lines were blown down near Floyd Knobs.
	Strong thunderstorm winds downed trees.	
Ripley Co, Lookout	26 1813 EST 8 8 8 TSTM Wind Strong thunderstorm winds downed trees.	Elthart Co: Bristol 29 I510 EST 0 0 ? ? TSTM Wind 25 Goshen 29 I540 EST 0 0 ? ? TSTM Wind New Paris 29 I680 EST 0 0 ? ? TSTM Wind Lightning
Decatur Co: Greensburg Lake McCoy	26 1821 EST 8 8 4 8 TSTM Wind 26 1830 EST 8 8 8 0 TSTM Wind	Strong thunderstorm winds downed trees at several locations. Nea Boshen an old barn was damaged. A lot of power outages occurred over eastern Elkhart County, mostly due to severe lightning.
	Strong thunderstorm winds downed trees and power lines. Several homes were damaged. Power was out over half of the city. An inch of rain fell.	Whitley Co, Columbia City 29 1655 EST 8 8 8 8 TSTM Wind  Just southwest of Columbia City, winds of 68 mph were reported.
Ripley Co: Batesville Osgood Sunman	26 1822 EST	Mosciusko Co:   Syracuse   29 1703 EST   0 0 ? ? TSTM Wind   Warsaw   29 1703 EST   0 0 ? ? Hail (1.5)
	Strong thunderstorm winds downed trees in Batesville. Hail 3/4 of an inch in diameter fell in Osgood. At Indiana Lake Campground near Sunman, 15 trailers and 2 cars were damaged by fallen trees.	Strong thunderstorn winds downed numerous tree limbs and caused power outages in Syracuse. At Marsaw, hail from 3/4 of an inch in diameter to golf ball size lasted about 5 minutes and covered the ground.
Ohio Co, Rising Sun	26 1850 EST 8 8 8 TSTM Wind  A hao radio operator with a Heathkit gauge measured a wind gust	Коsciusko Co, 2 5 S Marsam 29 1725 EST 8 8 ? ? Wind , Hail (1.
	to 68 mph. The strong winds downed trees.	Ocif ball size hail was reported by a HAM spotter south of Mars: Two trees were downed on cars, and numerous power outages occurr due to tree limbs and lightning in Warsaw.
Jefferson County	26 1815 CST 0 0 2 0 Thunderstorm Winds Trees and power lines were blown down in and	Huntington Co, Huntington 29 1733 EST B B 3 6 TSTM Wind
	around Madison.	In Huntington 69 mph winds were measured. Numerous trees and power lines were reported down.
Wayne Co: Centerville Boston	26 1983 EST 0 0 0 0 TSTM Wind 26 1924 EST 0 0 0 0 TSTM Wind	Mhitley Co, South Whitley 29 1735 EST B B 4 4 TSTM Wind  A barn was leveled, a corn silo was destroyed, 75 trees were
Puch Co	Strong thunderstorm winds downed trees.	uprooted, 3 cars and several homes were damaged by fallen trees, and power lines were reported down near South Whitley.
Rush Co, New Salem	26 1945 EST 8 8 8 2 ISTM Wind Strong thunderstorm winds downed trees,	Elkhart Co, Boshen 29 1888 EST 6 0 ? 7 Hail (6.75)
Hendricks Co, Brownsburg	TSTM 27 1150 EST 0 0 0 Wind, Hail (1.75)	Half inch hall was reported at the Goshen Airport, while 3/4 in hall that covered the ground was reported I mile east-southeast of the Boshen Airport.
	Strong thunderstorm winds downed trees, and golf ball size hail fell in Brownsburg.	Huntington Co. 29 1815 EST 8 9 3 8 TSTM Wind  Numberous trees were reported down in southern Huntington County
Marion Co, Acton	27 1227 EST 0 0 0 0 Hail (1.5)	with the trees blocking the road at several locations.
Vigo Co, Terre Haute	27 1256 EST B 8 8 TSTM Wind	Mabash Co. 29 1815 to 1930 EST B 8 4 8 TSTM Wind  Several barns were reported blown down northeast of Urbana, and
	Strong thunderstorm winds downed trees both in Terre Haute and Farmersburg. Also, the Vigo County Sheriff reported trees down at numerous locations across the county at 1316 EST.	nuserous trees and power lines were reported down in and around Lafontaine.  Grant Co. 29 1848 to
Shelby Co, 1W Waldron	27 1387 EST & 0 0 8 TSTM Wind Strong thunderstora winds downed trees and power lines.	1855 EST 8 8 3 8 TSTM Wind  Numerous trees and power lines were reported down in the city
Dubois Co, Jasper	27 1438 EST 0 0 0 0 TSTM Wind	of Marion and across Grant County. Trees were reported blocking the road in several locations.  Marshall Co.
	Strong thunderstorm winds downed power lines.	Culver 29 7??? B B ? 7 TSTM Wind
		Strong thunderstorm winds downed trees all around Culver. One tree fell on 2 cars, and some houses were damaged.
Knox Co, Bicknell Daviess Co:	27 1430 EST 0 0 0 TSTM Wind	F. 11 6-
	27 1430 EST 0 0 0 0 TSTM Wind 27 1435 EST 0 0 7 STM Wind 27 1435 EST 0 0 0 TSTM Wind	Fulton Co, Kings Lake 29 1930 EST 8 7 7 TSTM Wind and Leiters Ford Strong thunderstorm winds downed trees and power lines.

																			JULY 1987
		LOCAL	F PATH	PATH S)	NO. (		STIMA		CHARACTER			LOCAL	F PATH	PATH S)		OF SONS	ESTIM. DAM		CHARACTER
PLACE	DATE	TIME - LOCAL STANDARD	LENGTH OF (MILES)	WIDTH OF PATH (YARDS)	KILLED	INJURED	PROPERTY	CROPS	OF STORM	PLACE	DATE	TIME - LOCAL STANDARD	LENGTH OF F	WIDTH OF PAT (YARDS)	KILLED	INJURED	PROPERTY	CROPS	OF STORM
INDIAN	A									IOWA									
Madison Co: Summitville SNE Anderson IN Anderson Delaware Co, 7W Muncie	29 1 29 1	928 EST 925 EST 930 EST 930 EST			-	8	Ø 8 9	0 8 8	TSTM Wind TSTM Wind TSTM Wind	Carroll County, Carroll Kossuth County, 3NW Algona Calhoun County, Rockwell City	07	0145 CST 0200 CST 0200 CST			0 0 0	0 0 0	3 4 3	4 0 0	Tstm. Winds (54) Lightning Lightning
			storm	winds d	lowned	trees	. Sm	all h	ail also fell.		Midn:	ight. Num	nerous	reports	of d	lime t	o golf	ball	thwest Iowa around size hail were
Pulaski Co, Winasac Hancock Co,	Strong								TSTM Wind  d power outages flooding.	·	Alces to a only in C	ned down i ster, move farm near 2 miles o	in Unio ed sout Hawar of it o	n Count heast i den. I ccurred	y, So .nto I .ne to ! in I	outh D lowa a stal p lowa.	akota nd cau ath le A fun	about sed co ngth v nel cl	tornado that 3 miles north of onsiderable damage vas 8 miles, but loud was reported ed southeast into
Breenfield	29 2	<b>053</b> E9T			0	C	6	6	Hail (1.0)	Clarke and Northwest Decatur Counties	Durin parts	of South arke and l	west ar	nd Souti	h-Cent	tral I	Lowa.	Flash	Flash Flood rain fell.over flooding occurred hed out in Clarke
13 <b>IOWA</b>										Ida County, 1N Ida Grove		1238 CST			0	0	0	0	Funnel Cloud Funnel Cloud
Sac County, Odebolt	Lightni	55 CST ing stru	ck a ba	irn on (	the so	0 utheas and 35	4 it edg	ge of	Lightning Odebolt, setting it ed.	Buena Vista County, 1N Linn Grove Polk County, Des Moines	08	1310 CST 1333 CST			0	0	4	0	Tstm. Winds (50+)
Van Buren County, Farmington	04 19	950 CST		-	0	0	3	0	Lightning Unor damage.	Warren County, Indianola Marion County: Columbia		1400 CST			0	0	3	0	Lightning Lightning
Woodbury County: 2N Sloan Luton Monona County,		505 CST 525 CST			0	0	0	0	Funnel Cloud Funnel Cloud	2NW Pella Cherokee County, 6NE Cherokee	08 08	1450 CST 1505 CST	.1	15 15	0	0	3	3	Tornado (FO) Tornado (FO)
4S Sloan	Two thu		tms mov					The fi	Tornado (FO) rst produced do south of Sloan.	Hamilton County, 8N Roland Story County,		1525 CST 1525 CST	1	25	0	0	4	3	Tornado (F1) Tstm. Winds (60)
Adair County, Bridgewater	05 22 Lightni	230 CST ing kille	ed seve		0	0	3	0	Lightning a Charolais bull	Nevada Warren County, Hartford Muscatine County,	1	1530 CST 1712 CST			0	0	3 3	3	Hail (1.00) Tstm. Winds (52)
Jones County,	1	idgewate 216 CST	er.		0	0	3	4	Hail (.75)	Cranston Appanoose County,	1	1712 CST			0	1	0	0	Lightning
Wyoming Jackson County, Baldwin Jones County,	1	220 CST			0	0	3	4	Hail (.75) Lightning	Milledgeville Black Hawk County, Western Waterloo Tama County,	ł	1730 CST			0	0	5 3	4	Tstm. Winds (78) Tstm. Winds (60)
Monticello Jackson County, Maquoketa  Blackhawk County, La Porte City Buchanan County, Brandon	Thunder hail fe Montice 06 14	211 in W	yoming	and Ba	ldwin.	Ligh	tning	on cou g dama	Tstm.Winds (50+) nties. Dime-size ged two homes in Maquoketa. Hail (.75)	Elberon Benton County: Belle Plaine Vinton Van Horne Urbana 4N Urbana Linn County, Central City	08 08 08 08	1758 CST 1820 CST 1835 CST 1855 CST 1923 CST 1900 CST			0 0 0 0 0	0 0 0 0 0	3 4 3 4 0	3 4 4 4 0	Tstm, Winds (50+) Tstm, Winds (61) Hail (1.00) Tstm, Winds (57) Funnel Cloud Funnel Cloud
Benton County: 3N Urbana Urbana		42 CST			0	0	3	4	Hail (.75) Hail (.75)	Clayton County, 2N Strawberry Point Delaware County,		1930 CST 2000 CST			0 '	0	4 . 2	3	Tstm. Winds (50+) Tstm. Winds (50)
Linn County: Center Point Alburnette Palo 9 N Cedar Rapids 1 W Cedar Rapids 10 SE Cedar Rapids Johnson County, Solon	06 15 06 15 06 15 06 16 06 16 06 16 Severe east. were re into Li several One-inc	Numerous ceived inn Coun funnel ch diame	s repor as the ty. The clouds ter had	storms storms ne storm were	dime-s moved ms gai report rred i	ize ha from ned st ed wes n and	south rengi t and south	long w neast th ove d nort neast	Hail (.75) Hail (.75) Funnel Cloud Funnel Cloud Funnel Clouds Hail (1.00) Hail (1.00) Hail (1.00) Hail (1.75) then moved south- rith 40 MPE winds Blackhawk County r Linn County, and h of Cedar Rapids, of Cedar Rapids, the	Manchester  Page County, 75% Clarinda	after the s hail range produ in Ap Indis were cloud Mario downs in Ha	moon and ifternoon were rece e. A micr coing 65 to panoose Comola caus killed on lis were si on County, with no mmilton Co 2320 CST	evening and evening and evening object of 90 M county. In a farm ghted, anoth signifunty,	g hours ening h Most of occurr PH wind Light tween \$ m in Ma as wer er in C icant d lifting	. Thours. the ed over the set of	Nume wind   ver the dightn: struck of and County ornado ee County of the county ornado ee County of the cou	rms tr erous gusts e west ing in k a se \$30,0 y by l oes. unty. rted. f its	acked report were i ern pa jured wage t 00 dan ightni One to These founds	uring the early northeast through so of high winds and in the 60 to 70 MFH int of Waterloo, a 9-year-old girl reatment plant in sage. Eight cattle ng. Many funnel brando touched down tion. Tornado (F1) rinda, causing
Sioux County:	07 00	weakene	d. 2	50	0	0	5	3	Tornado (F2) Hail (.75)	Montgomery County,	consi 09 Six i	derable d 0300 CST inches of	amage. rain f	ell aro	0	0	3	5	Flash Flood
5E Rock Valley Sioux Center Plymouth County, LeMars Woodbury County, 3W Correctionville O'Brien County:	07 00 07 00	020 CST 030 CST 010 CST 020 CST			0	0	4 3 4	4 4	Tstm. Winds (58) Hail (.75) Tstm. Winds (60)	Page County, Clarinda	09 Raini stres level were	ts and fo	7.6 ircing and a	nches w creeks number mage in	out c of b Clar	f the uildi inda	ir ban ngs we alone	he Cla ks. W re flo was \$6	Flash Flood wrinda area, flooding water rose to window coded. Some roads 600,000. Area
Sheldon Sutherland 2N Sanborn Hartley	07 00 07 00	030 CST 045 CST 045 CST 050 CST			0 0	0 0 0	3 4 3 3	4 3 3	Hail (.75) Tstm. Winds (61) Tstm. Winds (60) Hail (1.75)	Taylor County, New Market	09 Light	0500 CST ning stru			0 New M	0 Market	3 , sett	0 ing it	Lightning on fire.
Cherokee County: 3NE Cherokee Quimby Clay County:		045 CST 045 CST			0	0	3	0	Lightning Lightning	Page County, Clarinda	Conti	0715 CST Inued heav through C							Flash Flood away River which
6SW Royal Royal Spencer Buena Vista County, Marathon	07 01 07 01	050 CST 103 CST 105 CST 110 CST			0 0 0	0 0 0	0 3 4 3	0 3 4 3	Funnel Cloud Totm. Winds (52) Tetm. Winds (62) Tetm. Winds (52)	Pottawattamie County, 3W Treynor	Light	0827 CST ning stru ic at a c			d a 3	1 7-year	0 r-old.	0 woman	Lightning who was directing

PLACE    TAKE   TAKE   TOWN	RACTER OF ORM
Sloux City Lightning struck a tree-in Sloux City, sending it through the roof of a house.  Clinton Thunderstorm winds blew over several trees and a few wind broken in Clinton.	
NEZO10-IAZO12-013 Southwest Iowa  OP- All Day  OP- All Da	Davenport. Out of
over flood stage for several days. Flooding was reported on the following rivers: West Nishnabotna, Nishnabotna, Nodaway, East Fork 102 River, Thompson and Chariton rivers.    102 River, Thompson and Chariton rivers.   1	oux River
Orange City	
Kossuth and Winnebago 11 1617 CST 5 20 0 0 5 4 Tornado (F1) Story County, Ames Crawford County, 24 1814 CST 0 0 3 4 Hail (.7 Ames Crawford County, 24 1900 CST 0 0 3 4 Tstm.Win	5) ida (50+)
Wright County,	
Humboldt County,   11 2114 CST	rthwest
Marshall County, 15 Marshall town 16 Severe thunderstorms formed over North-Central Iowa and developed into Central Iowa. Considerable damage occurred in Uright County. A funnel cloud was sighted in Webster County, and 2 more in Humboldt County. A tornado did considerable damage in and southwest of Buffalo Center. A second tornado touched down    12 246 CST 3 15 0 0 3 3 Tornado (FO)   10wa Into Central Iowa. Considerable damage occurred in and Morningside areas of Woodbury County as 67 FFW winds recorded there. Some urban flooding also was reported in City area. Most of the damage across the state was due to the county of the damage occurred in the contral Iowa. Considerable damage occurred in and Morningside areas of Woodbury County as 67 FFW winds recorded there. Some urban flooding also was reported in City area. Most of the damage across the state was due to the county of the count	were the Sious winds. ghted near
briefly in Marshall County. Winds gusted to 69 MPH at Ames.  Folk, Adair, Union, Ringgold, and Taylor Counties  12 0200 CST 0 0 4 5 Flash Flood Flash Flood Flooding over the Southwest counties, and prompted the issuance of a flash flood warning for Polk, Adair, Ringgold, Taylor and Union counties. Flash flooding form the Southwest counties, and prompted the issuance of a flash flood warning for Polk, Adair, Ringgold, Taylor and Union counties. Flash flooding from the Southwest counties and prompted the issuance of a flash flood warning for Polk, Adair, Ringgold, Taylor and Union counties. Flash flooding from the Southwest counties and prompted the issuance of a flash flood warning for Polk, Adair, Ringgold, Taylor and Union counties. Flash flood warning for Polk, Adair, Ringgold, Taylor and Union counties. Flash flood warning for Polk, Adair, Ringgold, Taylor and Union counties. Flash flood warning for Polk, Adair, Ringgold, Taylor and Union counties. Flash flood warning for Polk, Adair, Ringgold, Taylor and Union counties. Flash flood warning for Polk, Adair, Ringgold, Taylor and Union counties. Flash flood warning for Polk, Adair, Ringgold, Taylor and Union counties. Flash flood warning for Polk, Adair, Ringgold, Taylor and Union counties. Flash flood warning for Polk, Adair, Ringgold, Taylor and Union counties. Flash flood warning for Polk, Adair, Ringgold, Taylor and Union counties. Flash flood warning for Polk, Adair, Ringgold, Taylor and Union counties. Flash flood warning for Polk, Adair, Ringgold, Taylor and Union counties. Flash flood warning for Polk, Adair, Ringgold, Taylor and Union counties. Flash flood warning for Polk, Adair, Ringgold, Taylor and Union counties. Flash flood warning for Polk, Adair, Ringgold, Taylor and Union counties. Flash flood warning for Polk, Adair, Ringgold, Taylor and Union counties. Flash flood warning for Polk, Adair, Ringgold, Taylor and Union counties. Flash flood warning for Polk, Adair, Ringgold, Taylor and Union counties. Flash flood warning for Polk, Adair, Ringgol	Many  ds (57) (F1) 00 to 70
inches of rain fell in the area.  IAZ009-010-014  II- All Day 0 0 5 5 Flooding  West-Central, Central 16 Morning and Southeast Iowa Central and Southeast Iowa Central and Southeast Iowa-Flooding occurred on the following rivers: North Raccoon, South River, South Skunk and North Skunk.  Inches of rain fell in the area.  tornado south of Low Moor. The tornado damaged building farms, lifting one barn off its foundation.  Central and Southeast Iowa-Flooding occurred on the following rivers: North Raccoon, South River, South Skunk and North Skunk.  Idloward County, Cresco Winneshiek and 29 1810 CST 10 30 0 0 6 5 Tornado	on 3
IAZOO1-005   12- All Day-	ds (50+)
Worth and Mitchell 14 1540 CST 0 0 6 hail(1.75) Counties, 18 Grafton to Mitchell Mitchell Mitchell Mitchell. Hail accumulated to a depth of to 8 inches, destroying over 35,000 acres of crops. Damage was well over \$1,000,000 in agriculture.    Make and moved through largely rural areas until it his yard 2 miles south of Waukon. There it destroyed 2 build threw 2x4s through the walls of others. Damage at the 1 alone was around \$250,000. Winds downed many large tree walkon and in Lansing.	vest of a lumber- ings and unberyard
Kossuth County: Wittemore 14 1650 CST 0 0 3 5 Hail (1.00) 45 Algona 14 1655 CST 0 0 4 5 Hail (1.00) A chunderstorm produced quarter-size hail over the southwest part of Kossuth County.  Warren County, Warren County, 30 Afternoon 1 0 0 0 Heat ditioned apartment. F82P Warren County, 30 Afternoon 1 0 0 0 Heat	ircon-
Ida County, 14 1725 CST 0 0 4 5 Tstm. Winds (50+) Ida Grove Crawford County, 14 1820 CST 0 0 4 6 Hail (1.75) Charter Oak to Thunderscorms moved into Ida County producing high winds, downing Marshall County, 31 Evening 1 0 0 0 Heat	ion after
Dow City trees and damaging crops. As they moved into Crawford County, half Marshalltown I we to golf ball size pelted crops. The ground was covered by the hail. Damage to crops occurred on about 28,000 acres in Crawford County. Agricultural damage was estimated near \$1,000,000.  The ground was covered by the hail. Damage to crops occurred on about 28,000 acres in Crawford County. Agricultural damage was estimated near \$1,000,000.  The ground was found dead of neat stroke in an understance of the county. The ground dead of heat stroke in an understance of the ground dead of heat stro	ircon-
Fern Black Hawk County, 7 NE LaPorte City  At nearby Eppley Airport was the 13th consecutive day with atures of 90 degrees or above. F85P	
A line of thunderstorms moved into Grundy and Black Hawk counties. They spawned 2 small tornadoes. One touched down briefly near Fern in Grundy County. The second was spotted on Interstate 380, south- east of Waterloo.	
Adams County, 14 2110 CST 0 0 3 3 Tstm. Winds (70) 2 NE Corning	.5)
Nevada A thunderstorm produced strong winds and did considerable damage to trees and a garage in Nevada.  A thunderstorm produced strong winds and did considerable damage to trees and a garage in Nevada.  Montezuma  A thunderstorm dropped large hall in a few spots as it moved from near Liberal toward Dodge City.	
Hornick 18 1810 CST 1 15 0 0 1 3 Tornado (FO)  3E Holly Springs 18 1810 CST 0 0 4 0 Tests Winds (50)  A thunderstorm moved into Woodbury County, producing strong winds east of Holly Springs. A large wooden shed and adjacent porch were destroyed although no crop damage occurred. A small tornado touched down for 5 to 7 seconds near Hornick.  Little damage resulted.  10 2210CST 0 0 2 3 TSTM Wild County 1 2220CST 0 0 0 0 Funnel A thunderstorm wind gust was estimated at near 70 mph	nd (61)
Black Hawk County, Raymond  18 2335 CST .5 20 0 0 4 3 Tornado (F1) A tornado touched down near Raymond. A building was destroyed at a lumberyard, another building had the roof taken off.  South of Brewster, and a funnel was seen north of Levant. The funnel stayed aloft and some crops were damaged by the wind.	

	THE PERSONS DAMAGE CHARACTER	NO. OF ESTIMATED! PERSONS DAMAGE CHARACTER
PLACE	TTIME - LOCAL STANDARD OF PATH (VARDS) STANDARD STANDARD CHOCKE OF STANDARD CHOCKE STANDARD CHARACTER OF STANDARD STANDARD CHARACTER OF STANDARD STANDARD CHARACTER OF STANDARD STANDARD CHARACTER OF STANDARD STA	DATE  LENGTH OF PATH  (MILES)  MYDOP DATE  CHARGLES)  WITHED  LENGTH OF PATH  (MILES)  MYDOP DATE  CHARACTER  OF SCHOOL  CHARACTER  CHARACTER
KANSAS		KANSAS
Harper Co: Attica Anthony Summer Co, Caldwell	02 0255CST 0 0 2 0 TSTM Wind (52) 02 0315CST 0 0 3 0 TSTM Wind (52) 02 0315CST 0 0 3 0 TSTM Wind 02 0400CST 0 0 2 0 TSTM Wind A sewere thunderstorm formed in northwest harper County and produced damaging winds as it moved southeast. Five power poles were downed in Anthony and 3 more just north of Caldwell.	A line of thunderstorms formed botween Hutchinson and Anthony and produced winds of 65 to near 90 mph as it moved east toward Marion and Winfield. Winds were measured at 66 mph at Newton, 82 mph at Clearwater and 68 mph at Winfield.  Widespread minor damage was done, but some power poles were downed and roofs were damaged in a few spots. Most of the damage was concentrated north of
Republic Co, Kackley Jewell Co: Randall Jewell	03 1735CST 0 0 0 3 Hail (1.5) 03 1745CST 0 0 2 3 Hail (1.75) 03 1754CST 0 0 2 3 Hail (1.75) 03 1754CST 0 0 2 3 Hail (1.5) A severe thunderstorm formed in southwest Republic County and drifted west-southwest. Large hail damaged crops and broke a few windows. Runoff from the heavy rain washed out the railroad track between Randall and Jamestown.	Sherman Co: Goodland Airport 55 Goodland 15E Goodland A thunderstorm wind gust was measured at 60mph at the Goodland, but neither touched down.
Sumner Co, South Haven Chautauqua Co: Hale Sedan Montgomery Co, Coffeyville	04 0225CST 0 0 2 3 Hail (1.75)  04 0430CST 0 0 2 D TSTM Wind (52)  04 0445CST 0 0 2 D TSTM Wind (52)  04 0465CST 0 0 2 D TSTM Wind (52)  04 0600CST 0 0 3 0 TSTM Wind (61)  A cluster of thunderstorms moved east across the counties bordering Oklahoma from south of Wichita to Coffeyville. The storms produced winds of 60 to 70 mph. Minor damage was done to roofs and trees.	Finney Co, 96A1S Garden   City
Lane Co, Dighton	04 0345CST 0 0 4 0 TSTM Wind (68) Thunderstorm winds near 80 mph knocked down trees and power lines at Dighton.	Barton Co,   Great Bend Arpt.   05 0230CST
Finney Co. Garden City Gray Co. Cimarron Haskell Co. Sublette Ford Co. Dodge City Arpt. Meade Co. Meade Clark Co: 5E Minneola Ashland Edwards Co: 75 Offerle Kinsley	04 0353CST 0 0 3 0 TSTM Wind (55)  04 0430CST 0 0 4 0 TSTM Wind  04 0443CST 0 0 3 0 TSTM Wind (61)  04 0448CST 0 0 3 0 TSTM Wind (61)  04 0531CST 0 0 3 0 TSTM Wind (61)  04 0523CST 0 0 4 0 TSTM Wind (61)  04 0533CST 0 0 3 0 TSTM Wind (61)  04 0536CST 0 0 3 0 TSTM Wind (61)  04 0548CST 0 0 3 0 TSTM Wind (69)  04 0548CST 0 0 3 0 TSTM Wind (69)	Clark Co, 14N Ashland Meade Co, Meade Edwards Cc, Kinsley  05 0401CST  0 0 2 0 TSTM Wind (50)  05 0401CST  0 0 2 0 TSTM Wind (50)  05 0401CST  0 0 5 4 Flash Flood  A line of thunderstorms produced wind gusts of 50  to 75 mph as it moved from Garden City toward Dodge City, Great Bend and Ashland, Winds estimated at 75 mph did a good deal of damage to buildings and the hangar at the airport in Great Bend, and south and east of the airport grounds. A nearby farm had several large grain bins blow over, and some large tree branches fell and damaged cars. Other damage was mainly confined to broken limbs on trees and a few downed power lines.
Klowa Co, Greensburg	O4 0550CST 0 0 3 0 TSTM Wind (65) A series of thunderstorms produced winds of 60 to 80 mph as they crossed Southwest Kansas. A gust was measured at 70 mph at the Dodge City Airport. Considerable damage was done to buildings and planes at the Cimarron Airport. Mine cars of a freight train yere knocked from the track 5 miles east of Minneola. The roof was torn from a downtown building at Kinsley.	Runoff from heavy rains forced Coon Creek out of its banks north of Kinsley. The flood waters reached into 17 homes.   Summer Co:   Conway Springs   05 0510CST
Gove Co, Grainfield	04 0430CST 0 1 5 0 Lightning Lightning struck a home in Grainfield. A boy suffered a minor burn when a light fixture fell on his bed. The interior of the home was completely destroyed by the resulting fire.	SE Wichita
Reno Co, Turon	04 0600CST 0 0 4 0 TSTM Wind (61) Thunderstorm winds estimated at 70 mph caused widespread tree and roof damage at Turon.	25E Rose H111
Kingman Co, Kingman Harper Co, Anthony Reno Co, Pretty Prairie Summer Co, Wellington Sedgwick Co:	04 0700CST 0 0 4 0 TSTM Wind (61) 04 0700CST 0 0 4 0 TSTM Wind (61) 04 0710CST 0 0 4 0 TSTM Wind (61) 04 0740CST 0 0 4 0 TSTM Wind (65)	Coverage Co, Winfield   O5 0548CST   O 0 4 0 TSTM Wind (68)   Greenwood Co:   Madison   O5 0630CST   O 0 3 0 TSTM Wind   Woodson Co,   Yates Center   O5 0645CST   O 0 4 0 TSTM Wind   Co:   Humboldt   O5 0720CST   O 0 3 0 TSTM Wind   O5 0720CST   O 0 0 0 3 0 TSTM Wind   O5 0720CST   O 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Clearwater Yalley Center Harvey Co, Newton Cowley Co, Minfield Butler Co, near Elbing Marton Co. SW Florence	04     0735CST     0     0     3     0     TSTM Wind (71)       04     0740CST     0     0     4     0     TSTM Wind (75)       04     0800CST     0     0     4     0     TSTM Wind (75)       04     0820CST     0     0     3     0     TSTM Wind (59)       04     0830CST     0     0     3     0     TSTM Wind (61)       04     0845CST     0     0     3     0     TSTM Wind (61)	Moran  O5 0730CST  Severe thunderstorms developed over Wichita and produced damaging winds as they moved and spread to the east and southeast toward El Dorado and Winfield. The storms weakened somewhat as they then continued east through Greenwood, Woodson and Allen counties. The storms in Greenwood County then raced northeast toward Kansas City and became stronger again. (See next entry for details on regeneration)

											JULY 198
PLACE	STANDARD STA	PLACE		TIME - LOCAL STANDARD	LENGTH OF PATH	WIDTH OF PATH (YARDS)	PER	OF SONS	PROPERTY WAY	AGE	CHARACTER OF STORM
KANSAS		KANSAS	DATE	TIM	LENG	¥ID!¥	KILLED	INJURED	PRO	CROPS	
KANJA.									14		
Lyon Co, Emporta Airport Coffey Co, SE Lebo Osage Co, Lake Pomona Franklin Co, Homewood to 4E Ottawa Douglas Co: 3NW Baldwin City Lawrence Johnson Co: 2SW Garder 2S DeSoto 4W Olathe Leawood Vandotte Co: Augusta	lesser damage. Straight-line winds also damaged trees and roofs throughout the northwest side of of Douglass.  The storm was quite unusual in that a tornado-like vortex or strong updraft formed near the leading edge of the storm. The vortex remained aloft but was surrounded by straight winds of 80 to 100 mph which caused most of the damage.  Roof, tree and power pole damage was scattered throughout the storms path. The northeast part of Wichita from 19th to 16th Street North and from Grove to Hillside had major damage, and the entire roof was taken from one home. Three mobile homes had major damage at Mulvane. Damage was also reported at Andover, Augusta, Belle Plaine, Winfield, El Dorado and Rosalla.  Winds of 80 to 100 mph created a 3 to 5 foot storm surge on El Dorado Lake. Campgrounds on the east side of the lake were hit hard, with 127 camping trailers overturned or heavily damaged. Twenty-five people suffered minor injuries. A large floating dock was torn from its moorings resulting in a great deal of damage to the dock and scores of boats.  Damaging winds continued east toward Iola. Power poles were downed from west of Madison to Virgil. Part of the roof was taken from the City Hall in Yates Center and it hit an apartment house across the street. Major roof damage was done to several homes in Humboldt, and a barn was destroyed at Moran.  05 0633CST 0 0 2 0 TSTM Wind (52) 0 0730CST 0 0 3 0 TSTM Wind 0 0 0730CST 0 0 3 0 TSTM Wind 0 0 0730CST 0 0 3 0 TSTM Wind 0 0 0730CST 0 0 3 0 TSTM Wind 0 0 0730CST 0 0 3 0 TSTM Wind 0 0 0730CST 0 0 3 0 TSTM Wind 0 0 0 000CST 0 0 3 0 TSTM Wind 0 0 0 000CST 0 0 3 0 TSTM Wind 0 0 0 000CST 0 0 3 0 TSTM Wind 0 0 0 000CST 0 0 3 0 TSTM Wind 0 0 0 000CST 0 0 3 0 TSTM Wind 0 0 0 000CST 0 0 3 0 TSTM Wind 0 0 0 000CST 0 0 3 0 TSTM Wind 0 0 0 000CST 0 0 3 0 TSTM Wind 0 0 000CST 0 0 3 0 TSTM Wind 0 0 000CST 0 0 3 0 TSTM Wind 0 0 000CST 0 0 3 0 TSTM Wind 0 0 000CST 0 0 3 0 TSTM Wind 0 0 000CST 0 0 3 0 TSTM Wind 0 0 000CST 0 0 3 0 TSTM Wind 0 0 000CST 0 0 0 3 0 TSTM Wind 0 0 000CST 0 0	Clay Co: Oak Hill Longford Ottawa Co: 3E Delphos 3M Delphos Olickinson Co, Abilene Lincoln Deverly Lincoln Salina Co: 5MA3S Dighton 4MAGN Dighton Ness Co, 1.5NE Dover 1.5NE D	but the south southis south so	1830CST 1955CST 1950CST 2030CST 1950CST 2030CST 1950CST 2224CST 2215CST 2224CST 2100CST 2100CST 2100CST 2100CST 2100CST 2100CST 2120CST 2120CS	a seveled as a sev	ral isos ral isos ratedam rate	lated acceptance of the control of t	area: a read of the court of th	s that seed from the seed from	were method where the method was a sound of the method was a method was a method was a sound was a sou	f a side A A A A A A A A A A A A A A A A A A A

PLACE	TTME - LOCAL TTME - LOCAL LENGTH OF PATH (WILLES) WILLED AND STANDARD CARODS WILLED AND STANDARD CARODS WILLED AND STANDARD CARODS OF ESTIMATED, DELANGTH OF PATH (TARDS) CARODS OF ESTIMATED, DELANGTH OF PATH (TARDS) CARODS OF ESTIMATED, DELANGTH OF PATH CARODS	DATE  TIME - LOCAL STANDARD STANDARD (VARDS) WIDTH OF PATH (VARDS) WIDTH OF PATH (VARDS) CROPS C
Summer Co: Mayfield Mulvane Bolle Plaine Sedgrick Co, SE Wichita Butler Co, Augusta  Marshall Co, 2W Oketo  Finney Co, Gardon City Arpt. Grav Co.		Were blown off and a number of houses had considerable damage. Damage in Salina was estimated at \$1.25 million. The wind also damaged several barns and other buildings in southern parts of Washington and Marshall counties.  A man was injured when lightning struck near him north of Osage City. The man was an ambulance attendant and was loading a person injured in a car wreck. He was not hit directly by the stroke but was injured when he was thrown by its force. He was kept overnight in the hospital for observation.  Shawnee Co: Topeka  12 0235CST 0 0 3 0 Hail (1.0) 3SE Topeka 12 0240CST 0 0 2 0 TSTM Wind (52) A thunderstorm dropped inch diameter hailstones and produced winds estimated at 60 mph as it crossed the southeast side of the city.
Gray Co, Cimarron Haskell Co, Sublette Ford Co, Bucklin Kiowa Co:	11 2256CST 0 0 2 0 TSTM Wind (55) _ 11 2317CST 0 0 2 0 TSTM Wind (56) 12 0012CST 0 0 3 0 TSTM Wind (52) 12 0041CST 0 0 2 0 TSTM Wind (55)	Sedgwick Co. Derby  12 1734CST 0 0 0 0 Hail (.75)  A thunderstorm dropped 3/4 inch hail at Derby and produced winds that caused tree damage north of Belle Plaine.
Greensburg  2E Greensburg  Edwards Co, Kinsley Pawnee Co, Larned Clark Co, 10 S Bucklin Comanche Co,	12	Summer Co, Argonia  12 1753CST 0 0 3 3 Hail (1.5) A thunderstorm dropped hail the size of quarters for a short time at Argonia.  Sedgwick Co, McConnell AFB  12 1900CST 0 0 3 2 Hail (1.0) Inch diameter hailstones fell briefly in southeast Wichita around McConnell Air Force Base.
7N Protection  Rice Co: Chase Lyons	12 018CST	Grant Co,     4W Ulysses
Saline Co: SW Salina Salina Airport Salina Airport 2W Solomon Cloud Co: Concordia Airport	12 0215CST 0 7 4 0 TSTM Wind 12 0235CST 0 0 6 3 TSTM Wind (80) 12 025CCST 0 0 6 3 TSTM Wind (85) 12 0320CST 0 0 4 3 TSTM Wind (70)  12 0320CST 0 0 4 2 TSTM Wind (56)	Gray Co,   55 Ensign
5W Clifton Clay Co: Clay Center Fact 1S Clifton Dickinson Co: 1E Solomon	12 0320CST	spots as it moved northeast from Ulysses and Hugoton toward Dodge City. A good deal of crop damage was done, and some vehicles were also dented.  Leavenworth Co, 3W Tonganoxie 17 1730CST 0 0 3 0 TSTM Wind
Abilene Airport Washington Co: Clifton Barnes IN Parallel Geary Co, Junction City Riley Co, 2S Parallel Marshall Co: Blue Rapids BS Waterville	12 0400CST 0 0 4 2 TSTM WIND (56)  12 0320CST 0 0 4 2 TSTM WIND (56)  12 0400CST 0 0 4 2 TSTM WIND (56)  12 0400CST 0 0 4 2 TSTM WIND (56)  12 0340CST 0 0 3 0 TSTM WIND (52)  12 0400CST 0 0 3 0 TSTM WIND (52)  12 0400CST 0 0 3 3 TSTM WIND (52)  12 0400CST 0 0 3 3 TSTM WIND (61)  12 0400CST 0 0 4 3 TSTM WIND (61)	Thunderstorm winds blew off part of a carport type roof over a mobile home west of Tonganoxie. Two cars were damaged when the roof hit them.  Scott Co.  17 1814CST 1 50 0 0 0 Tornado (FO) A tornado touched down briefly southeast of Scott City. No damage was done.  SPECIAL HAIL SUMMARY
Mabaunsee Co. Alma Pottawatomie Co: Westmorel and St. Marys Osage Co. 2N Osage City Douglas Co: 2S Lecompton 6S Clinton Lake Clinton Lake	12	Kansas-Oklahoma Hail Loss Service reports indicate hail was especially damaging to crops in the listed counties on the following dates:  Ol Scott, Sheridan, Thomas O2 Sheridan O3 Wallace O4 Finney, Gray, Thomas O5 Gray, Haskell, Seward O9 Stanton 10 Pratt 11 Finney, Gray 14 Ford, Grant, Gray, Stanton 19 Gray, Haskell
	developed just west of Concordia and moved east. Storms then filled in between the two and formed a line that moved east to a line from Marysville to near Lawrence before they weakened. The storms produced damaging winds in scattered areas along the path of travel. A wind gust was measured at 98 mph at the Salina Airport.  Four hundred National Guard troops camped at the Smoky Hill Range west of Salina had their tents and equipment damaged. Seven of the guardsmen suffered minor injuries. The south side of Salina was hit hardest. Parts of the roofs of two shopping malls	·

		CAL	PATH	Ę	NO. OF PERSON		AATED <sup>†</sup> MAGE				CAL	РАТН	Ę		OF	ESTIMATED <sup>†</sup> DAMAGE	
PLACE	DATE	TIME - LC STANDARD	LENGTH OF (MILES)	WIDTH OF PA (YARDS)	KILLED	COPES	CROPS	CHARACTER OF STORM	PLACE	DATE	TIME - LC STANDARD	LENGTH OF (MILES)	WIDTH OF PA (YARDS)	KILLED	INJURED	PROPERTY	CHARACTER OF STORM

	TIN STA	Z S	, L	Z	8	CRO		] [	δ	TIM	Ê	Qi ≱	KILL	3	ğ.	CRO	
15 KENTUCKY								KENTUCH	(Y								
Laurel County	03 1715 EST		0	4	0	0	Lightning	Webster County	l	1515 CST			0	0	4	٥	Thunderstorm Winds
	A forty-nine ye daughter, her l						To.	-	65 M	PH winds t ge was re	were re	ported	in Pr	ovide	nce. I	Extensi	.ve .t~
	Keary; and an	li year o	ld boy	of I	Hazard,	were			bu11	dings wer	e destr	oyed a	nd ext	ensiv	e dama	age	
	getting off of of Laurel Lake									done to a cture dam						2r	
	adjacent to the	e boat ram	p, whe	n 119	ghtning	struck			]							ρ	**************************************
	nearby tree. The along the bank,							Hopkins County		1524 CST			0	0	2	-	Thunderstorm Winds
1	bodies. All fou from shock and	ır people	suf fer	ed mi	inor in	juries				e trees wo on Spring							
Sallard County	04 1500 CST		0	1	4	0	Thunderstorm Winds	Christian County	l	1530 CST			0	0	3		Thunderstorm Winds
ŀ	Sixty mile per several trailer vehicles near S	s, collap Slater and	sed ba Gage.	rns, One	and dan	maged r home			port	s were bl able sign through	s destr	oyed a	s 60 t	o 70	MPH w	and inds	
	overturned with injuring her sl						nds	Hancock County	05	1556 CST			0	0	3	0	Thunderstorm
	caused high way	es on the	Missi	ssip	pi and (	Ohio		I mancock sounds	l				· ·		14	<b>L</b> 1 arr	Winds
1	rivers.presenti under construct was blown down. sporadically do	ion on Hi Power an	ghway d tele	60 ne	ear Futi e lines	ure Cit			down cloc	large tr througho ked at Ha ked by fa	ut the wesvill	county le. Twe	. 83 N	PH v:	inds w	ere	
raves County	04 1510 CST		0	0	3	0	Thunderstorm Winds	Crittenden County	05	1558 CST	:		0	0	2	0	Thunderstorm Winds
	Fifty to sixty Some trees were								Tree	s were bl	own dos	m acro	ss US	60 n	ear Ma	rion.	
1	Was reported.		^				Thund	McClean County	05	1605 CST			0	0	3	3	Thunderstorm Winds
- '	04 1715 CST Trees and power some damage to						Thunderstorm Winds		were	s were bl damaged Calhoun.	through						
	near Hardinsbur							Daviess County	05	1605 CST			0	0	3	0	Thunderstorm
allard County	05 1400 CST		0	1	4	0	Thunderstorm Winds			large tr							Winds
	A mobile home w						711145		Davi	ess Count	y, some	block	ing tr	affi	c on H	ighway	
	MPH winds blew mobile home whe							11	ļ				_	_		_	
	neighboring res trailer as it r	ident's ca	r. One	woma	in was i	in the		Ohio County	Tree	1606 CST es and pow		es were	0 blow	0 n dow	3 min E	-	Thunderstorm Winds
cCracken County	05 1410 CST		. 0	0	3	0	Thunderstorm		Dam.	•							
	59 MPH winds we	ere record	ed at	the 1	Nationa:	l Weath	Winds er	Muhlenberg County	05	1608 CS7	r		0	0	0	0	Funnel Cloud
	Service office inch in diamete blown down on U	in West P r hail. L	aducah arge t	, ald	ong with limbs we	h 1/4 ere				unnel clou derly cros				111sí	de Roa	ıd near	
†	Five Paducah re damaging their	sidents r cars or h	eporte omes.	d fal A chi	llen tre Ild was	ees trappe	d	Muhlenberg County		1610 CST			0	0	4	0	Thunderstorm Winds
	in a car by fal damage to a few				rted.		-		bles	ds gusting w down pow es overtur	er lin	es in t	he co				
	05 1415 CST	- dar- 1-	0	0	2	0	Thunderstorm Winds	Breckinridge County	l	es overtur 1610 CST	нес пе	wr rowc	0	0	.3	0	Thunderstorm
	Trees were blow	m down in	-	eld.		0	Thundanston			es and pow	ver lin	es were	blow	n dow	n in		Winds
	05 1440 CST A 52 year old w	Joman Gree	0 severe	-	4 niured s		Thunderstorm Winds		Hard	dinsburg.							
	two to three fo	ot in dia	meter	tree	fell or	n the		Daviess County	05	1612 CST			0	0	3	0	Thunderstorm Winds
	top of her movi Church. The car miles east of S	was head	ing we	ingst st or	ton Char n KY 70	pel , 3				nsboro rep n in the c		trees a	ad por	wer 1	ines b	lown	
	05 1500 CST		0	1	3	0	Thunderstorm	Grayson County	05	1614 CST	?		0	0	3	0	Thunderstorm Winds
	60 to 70 MPH wi Trees were blow buildings, and	m down and	d uprod	oted,	damagin	ng home	Winds s, r		Leit	es and pow tchfield. orted.							
	lines, downing out of a fast f	them. A p.	late gi	lass	window	blew		Grayson County	05	1616 CST			0	0	0	0	Funnel Cloud
	injury.			_			m		ì	unnel clou	ıd was	spotte			eta.	^	M
	05 1500 CST Trees were upro	oted and I	0 blown o	0 down.	3 damagin	0	Thunderstorm Winds	Barren County		1620 CST s blew dov	n resu	lting i	0 in num	0 ercus	j power		Thunderstorm Winds
	several buildin		yville.	•	_		Mh. Janes		outag	ges in Gla						a	Thundarstor
opkins County	05 1500- 1600 CST		0	0	3	0	Thunderstorm Winds	Hardin County		1620 CST PH winds v	ere re	corded	0 in El	0 1zabe	3 thtown	-	Thunderstorm Winds
	60 MPH winds we Anton. Trees we some landing i	re blown o n power li	down th ines. 1	hroug The m	hout th	e coun			trees	s and power			, some	of w	hich t	locked	
	damage was in t Plains, Nebo, a				often,	white		Warren County		1620 CST				0	2	0	Thunderstorm Winds
nion County	05 1505 CST		0	0	3	0	Thunderstorm Winds		Seve	s and powe ral trees ersity Can	blocke	d roads	. Wes	tern	Kentuc	:ky	
	Trees were blow Long Road. A tr	ailer was	damage	ed ne	ar Morg	anfiel	i.	Meade County		1625 CST			0	0	4	0	Thunderstorm
	There were repo trees and damag	rts of dov	med po	ower	lines,	uproot				s that ave	eraged	from 60	) to 7	9 мрн	l blew	over	Winds
	county, with the	e hardest	hit ar	геа п		livan.		11	one t	mobile hor	me and	damage		use o	n High	ıway	

		CAL	РАТН	NO. OF ESTIMATED PERSONS DAMAGE  CHARACTER  CHARACTER						CAL	РАТН	Ŧ		). OF		MATED! WAGE			
PLACE	DATE	TIME - LOCAL STANDARD	LENGTH OF (MILES)	WIDTH OF PAT (YARDS)	KILLED	INJURED	PROPERTY	CROPS	CHARACTER OF STORM	PLACE	DATE	TIME - LOCAL STANDARD	LENGTH OF (MILES)	WIDTH OF PATH	KILLED	INJURED	PROPERTY	CROPS	CHARACTER OF STORM
KENTUC	:KY									KENTUC	KY								
Edmonson County	05	1625 CST			0	0	3	0	Thunderstorm	Shelby County	05	1730 CST			0	0	3	0	Thunderstorm
	Tree	o 60 MPH s s blew dos minor proj	m. Ele	ctrical	. powe	er was	inte	sville. errupte	Winds		throu	Kentucky ghout She ing roadw	1by Co						Winds
Meade County	1	1630- 1640 CST		- 0	0	0	4	0	Thunderstorm Winds	Metcalfe County		1730 CST			0	0	4	0	Thunderstorm Winds
	blew	PH winds winds and	were u	prooted	, por	wer li	ines :	fell, a			One t	blew dow railer ov			northe	ast (			
	À po	trical and	off of	the fun	eral	home	in Br	anden-		Marion County	1	1730 CST were blo	wn dow	n,bloc	0 king r	0 oads	3 n∈ar	0 Lebanon	Thunderstorm Winds
	were build	and damag damaged o dings. Tre erty.	n home	s and 1	ifted	off	of ou	ıt-		Casey County	Hail,	1730 CST							Hail(1.75)
Hart County	05	1635 CST			0	0	4	0	Thunderstorm		Ridge	Road nea	r Libe	rty, d	amagin	g the	e toba	eco cro	
	the e Munfo A 32 roof damag	cal buildi eastern po ordville. X 80 foot was torn ged. Anoth s south of	rtion A 20 f equip from a er tob	of Hart oot by ment she house a acco bar	Coun 70 fo ed wa and a	ty ne ot si s des milk	ar lo wa troye barn	ıs leve:	Winds Led.	Washington County	Large Sprin by the	1735 CST e limbs and singfield. the wind, round. A 400 feet was spli	nd fal A 60 X scatter tractor from 1	30 foo ring it r was l ts orig	ot bui ts deb blown ginal:	lding ris o off o spot.	was over and	demolis n acre landing	
Nelson County	1	1650 CST	r line	s fell :	O in Ba	0 rdsto	4 wn wh	0 ere 50	Thunderstorm Winds	Henry County		1740 CST			0	0	3	0	Thunderstorm Winds
	to 60 Bloom	) MPH wind nfield are lairy farm	s were as wer	records e the h	ed. T ardes	he Hit t hit	gh Gr in t	ove and	l nty.		in C	PH winds ampbellsb	urg.	own tre				nes	
	Bloom	afield suf lings, she ged or des	fered ds, an	extreme d roofs	dama:	ge. Th	here,	out-		Cumberland County	1	1742 CST		sighte	0 d near	0 Burk	0 esvil	0 le.	Funnel Cloud
Bullitt County		1659 CST	croyen	•	0	0	3	0	Thunderstorm	Cumberland County	05	1743 CST			0	0	0	0	Funnel Cloud
	Trees	and powe	r line	s blew o	down	in Sh	eperd	sville.	Winds	1	A fu	nnel clou	d was :	report	ed nea	r Ket	tle.		
LaRue County	Trees The m	1700 CST s and power nost conce neast of H lone to th roof of t	ntrate odgenv e Lince	d damage ille. Si oln Boyl	was ubstan	repor ntial Home r	rted tree near	east ar damage New Hav	ıd :	Russell County	Tree bloc dest trai	1745 CST s and pow king road royed in ler near rely dama	er line s and : Pine C the ci	sidewa rest C	lks. O ampgro	ne tr und,	ailer and a	was nother	
Jefferson County	Easte and p Road area	1700 CST ern Jeffer power line and Hurst Trees fe	damag borne 11 on	e, espe Lane, a many ho	ciall nd in uses.	y alon the . Two	ng Br Ancho homes	ownsbor rage that	ro	Anderson County  Boyle County	Larg gust	1750 CST e trees f ed to 60 1750- 1800 CST	ell ac	ross t	0 he cou 0	0 nty s 0	3 is <b>wi</b> n 3	0 ds 0	Thunderstorm Winds Thunderstorm Winds
	Gas lost sever went block local substitute of falli	under cor and Electr power. The re, damage through I ked street tions acro tantial da county. Ca lng trees l	ey receives course cours and course cours and course cours	pany re orded to since to lle. Tre sidewald isville oroofs trucks on them	porte his s he 19 ees a ks in . Fal of h were . Six	torm 74 to 74 to 74 to 74 to 75 at 16 76 to 76 dest 77 to	000 c the m rnado rge 1 east rees acro royed seve	custome: nost that imbs 325 did ess when		Franklin County	acro equi One limb elec	rous larg ss Boyle pment, wa trailer w s caused trical ou	e tree County s blow as rep power tages.	. A ba: n down ortedl;	rn, us on Sa y dama	ed to 1t Ri ged.	stor ver R Large	e farm oad tree	
Taylor County		vinds were	commo	n acros	s the O	0	з	0	Thunderstorm Winds		port:	s were bl ions of F green are	rankli:						1
		o 70 MPH w numerous p					inley	. Trees		Mercer County	05	1755 CST			0	0	3	0	Thunderstorm Winds
Jefferson County	A la	1718 CST									Harr	s and pow ughout th odsburg a ary Lane.	e coun	ty, mos	st num	erous	in t	he	
Jessamine County	Louis	aurant at sville. 1720 CST	orn an	u Liberi	ty st	, eets	1n d		Thunderstorm	Woodford County	05	1800 CST			0	0	4	0	Thunderstorm Winds
	Major anter throu swept	wind dam nnaes, how ighout the , never to ted in Ni	es, an count be re	d lawn a y. Many covered	buil acces smal	sorie: 1 ite:	, tel s was	evision report	Winds n sed		Frank One I fall: fire		e, sout severe e home	th and ely dar	north maged t	of V when	ersai a powe cture	lles. er line to cate	
Taylor County		1725 CST			0	0	0	0	Funnel Cloud	Adair County	1	1800 CST and pow		s were	0 e blown	0 n dow	3 nin(	0 Columbia	Thunderstorm Winds
Oldham County	Ì	nel cloud 1725 CST	was si	ghted n	ear C	Campbe O		ille. 0	Thursdayat	Cumberland County	ĺ	1800 CST			0	0 .		0	Thunderstorm
oranem County			. 14		-	•	4 h1a	-	Thunderstorm Winds		Tree	and lar	ge limb	s were	blow	n dow	n <b>1</b> n l	Burkesvi	Winds lle.
•	roads Jeffe Buckn	and power from Createrson Count er, along	stwood ty line Highwe	along H , and f y 146.	ighwa rom C Numer	ay 22 Crestw cous 1	to the rood the large	ne to		Wayne County	Trees	1800 CST				0 aghou	3 t the	0 county	Thunderstorm Winds
	wall	fell in i collapsed ing a van.	at the	alley.	nn Mo	nirds tel i	of a	a orick Grange,			bloc	king many	major	roads	•				LITT-

				JULY 1987
PLACE	TIME - LOCAL STANDARD LENGTH OF PATH (VAROS) KILLED KILLED KILLED ROPERTY GROPS GROPS GROPS	CHARACTER OF STORM	PLACE	TIME - LOCAL STANDARD LENGTH OF PATH MILLED
KENTUC	KY		KENTUC	KY
· ·				· ·
Clinton County	¥	hunderstorm linds	Henry County	Winds
	Large trees and power lines blew down in Albany blocking sidewalks and streets.			Trees and power lines were blown down in Eminence, with many roads blocked.
Pulaski County		hunderstorm	Bullitt County	06 1620 CST 0 0 3 0 Thunderstorm Winds
	55 to 60 MPH winds were clocked across Somerset. Numerous trees and power lines fell across the	111111111111111111111111111111111111111		Downed trees knocked out power lines and blocked roads between Sheperdsville and Mt. Washington.
	county. A fireworks stand at Somerset toppled over.		Scott County	06 1625- 0 0 3 0 Thunderstorm
Garrard County	05 1815 CST	Thunderstorm		1636 CST Winds Numerous large trees and power lines were blown
	A Paint Lick farmer was picked up and thrown to the ground during strong winds as he was trying	linds		down throughout the county, blocking several roadways. Three large pillar columns were knocked down from the entry porch on the White Oak Pike
	to round up cattle. As he was forced to the ground, he was able to look up and see tree	}		Home.
	branches, limbs, and pieces of tin roofing fly over his head. He was only injured slightly. The		Nelson County	Winds
	area between Paint Lick and Cartersville suffered extensive tree and power line damage. Many downed trees blocked roads.			Winds gusting to 60 MPH downed trees and power lines throughout the central portion of Nelson County, especially near Bardstown.
Lincoln County		hunderstorm linds	Meade County	06 1630 CST 0 0 3 0 Thunderstorm Winds
	Downed trees and power lines resulted in widespread power outages in the McKinney area.			79 MPH winds were clocked at Brandenburg causing trees and power lines to fall.
Caldwell County		Thunderstorm	LaRue County	06 1630 CST 0 0 4 0 Thunderstorm Minds
	Trees blew down on houses, resulting in thousands of dollars worth of property damage in Princeton.	villes		Large trees were blown down and uprooted across the county. Two barns were blown down and a new roof was ripped off in White City.
Ohio County		Hail (1.00)	Grant County	06 1630- 0 0 3 0 Thunderstorm
	Hail, one inch in diameter, fell in Fordsville.			1730 CST Winds
Henderson County		Thunderstorm Vinds		A few trees and many large limbs blew down through- out the center of Williamstown. One large limb landed on a house, damaging it. There were scattered electrical power outages reported.
Jefferson County		Chunderstorm	Franklin County	06 1630- 0 0 3 0 Thunderstorm
	72 MPH winds were recorded at the National Weather Service Forecast Office in Louisville at 1549 CST. Butler Aviation reported a triple-chalked plane moved by the wind gusts. A 41-foot cruiser boat was overturned in dry dock near Standiford Field Airport. Tree and power line damage was extensive	linds	Spencer County	1700 CST Winds  A few trees and many large limbs blew down in the county. Electrical power outages were widespread as falling trees carried down power lines. A few windows were blown out in Frankfort.  06 1635 CST 0 0 3 0 Thunderstorm
Jefferson County	across the county, especially in eastern Jefferson County near Anchorage. Roads were blocked by the fallen trees and power lines.	unnel Cloud	apencer county	06 1635 CST 0 0 3 0 Thunderstorm Winds Trees and power lines were blown down in Taylors- ville. A brick chimney bliev off of a house and onto the next door meighbor's house. A few barns
,	A funnel cloud was sighted two miles west of	diller cross		sustained damage.
	the Weather Office in Louisville near Crittenden Drive.		Hardin County	06 1638 CST 0 0 4 0 Thunderstorm Winds Trees and power lines were reportedly blown down
Oldham County		hunderstorm Finds		throughout the county, most numerous near Elizabethtown. Winds tore off and flipped the roof off of a drive through window at a bank in Vine Grove.
	without power. A hotel breezeway was blown onto a car.		Anderson County	06 1645 CST 0 0 4 0 Thunderstorm
	Trees were ripped down, power lines snapped, and pa of a brick wall sheared off of a motel in LaGrange. Downed trees blocked major streets. Power lines made streets impassable. Vehicle damage included four cars crushed by falling trees on Maple and			Winds 77 MPH winds were recorded at Lawrenceburg where numerous trees blew down or were uprocted. Many streets were blocked by storm debris. A tree fell through one house roof near Lawrenceburg.
	Birch Avenue.		Woodford County	06 1645 CST 0 0 3 0 Thunderstorm Winds
Trimble County		hunderstorm inds		High winds uprooted trees which in turn blocked roads and disrupted service to electrical power throughout the county. Some of the trees that fell measured two feet in diameter, Storm-felled
Treff	Power Plant.			trees damaged fences and utility lines and poles.
Jefferson County		hunderstorm Inds	Shelby County	06 1648 CST 0 0 4 0 Thunderstorm Winds Widespread tree damage was reported 10 miles north of Shelbyville. It rook three days to restore downed power lines to working order. A metal shed anchored with four feet into the ground was lifted and strewn across a road. A small frame house at Beechridge was completely destroyed when large trees toppled onto it. One house roof was taken off of a home on Mt. Eden Road.
Jefferson-Oldham County Line	W A trained SKYWARN spotter recorded 69 MPH winds	hunderstorm	Mercer County	06 1655- 0 0 4 0 Thunderstorm 1709 CST Winds
	in Prospect. Numerous trees and power lines were blown down.			Trees to three feet in diameter blew down between Shakertown and Marrodsburg, blocking US 68. Several other county roads were blocked by other downed trees. A church steeple was blown down and three barns were severely damaged.

	CAL	PATH ATH	NO PER		TIMATEI DAMAGE					CAL	PATH	Ę		). OF RSONS		MATED† MAGE	]
PLACE	DATE TIME - LOCAL STANDARD	MILES)	KILLED	INJURED	PROPERTY	CROPS	CHARACTER OF STORM	PLACE	DATE	TIME - LOCAL STANDARD	LENGTH OF !	WIDTH OF PATH (YARDS)	KILLED	INJURED	PROPERTY	CROPS	CHARACTER OF STORM
KENTUC	KY ,							KENTUC	KY								
Scott County	06 1700 CST		0	0 3	0		Thunderstorm	Nicholas County	06	1739 CS	Т		0	1	4	0	Thunderstorm
	50 to 60 MPH in diameter t county was wi	hroughout th	ne coun			2S	Winds		inte	s toppled ersection th of Carl ler turne	of Old isle.	Blue L One man	icks	Road	and US	68	Winds e
Fayette County	06 1700 CST		0	1 4	0		Thunderstorm Winds	Taylor County	06	1740 CS	r		0	0	3	0	Thunderstorm Winds
	56 MPH wind g Weather Servi amount of lar and throughou	lce Office i rge diameter it Fayette C	n Lexir trees ounty.	ngton. A were dow Many str	An enorm wned in eets an	mous Lex:	ington		to	es blew do 60 MPH. Ha 1 during (	il, on	e-half					d
	roads were bl fell on homes few roofs wer	s and vehicl	es, dan	naging bo	th. A	on.		Estill County	06	1745- 1800 CS			0	0	3	0	Thunderstorm Winds
	A 72 year old Ballard Place hour. He was	when the p	ower we	in an ele ent out i	evator a for one	at			cou	erous larg nty block: nty was w	ing roa	ds. One	half	of o	the ent	ire	
	The Lexington				ee dama	age		Harrison County	06	1745- 1800 CST			0	0	3	0	Thunderstorm Winds
	One woman spe Junior League part of the i	Horse Show	when w						and	ge trees ( yards as n 55 to 60	winds						ı
	Trees fell or starting a la		Lexing	gton gas	pump,			Bath County	Ì	1745 CST			0	0	2	0	Thunderstorm Winds
Boyle County	06 1712 CST	_	0	0 3	3 0		Thunderstorm			eral large iways.	trees	fell a	cross	the	county	, block	ing
	50 to 60 MPH and large lim addition was	abs across B	oyle Co	ounty. A			Winds	Robertson County	Tree	1800 CST es, from toss Robert							Thunderstorm Winds
Clark County	06 1715 CST		. 0	0 3	0		Thunderstorm Winds		50	to 60 MPH.				e vic	lesprea	ıd.	
	Very large tr roads in Clar a motel in Wi some guests.	k County, A	roof v	eas blown	off of			Adair County	60 1	1800 CST TPH winds power lin				olumi		0 trees	Thunderstorm Winds
Jessamine County	06 1715 CST	• •	0	0 3	0		Thunderstorm	Lincoln County	06	1801 CST			0	0	0	0	Funnel Cloud, Thunderstorm W
·	Large trees fe roads were blo				m over.	us •	Vinds		top	unnel clou were cli Greasy Ri	pped a	nd some	larg	e old	d trees	fel1	
Washington County	06 1718 CST Large limbs an Lightning stru	nd trees ble			gfield.		Thunderstorm ∤inds,Lightning	Pulaski County	06	1815 <sub>,</sub> CST			0	0	0	0	Funnel Cloud
	to the ground.		n	0 3			Thunderstorm	Casey County		nnel clou	id was	sighted	sout 0	h of O	Somers 0	et. O	Funnel Cloud
Taylor County	06 1720 CS1 55 to 60 MPH wore mile north	vinds blew d	own tre	es and p	ower li	ines	inds		A fi	nnel clou Liberty		sighted			way 15	47	
Marion County	diameter, was		ed. O	0 4	. 0		Thunderstorm	Pulaski County	-	at overtu		ı Lake (	Cumbe	-	3 I near	Somers	Thunderstorm Winds et
tarion bounty	Trees were blo	own down in	and nea	ır Calvar	y. A fe	ew	dinds			rinds gust ughout no						n down	
	trees were up were extensive a porch blew o was ripped off	off of anoth	had the	roof bl	lown off m sidir	f, ng		Green County		1826 CST s were bl		en in G	0 reens	O burg.	2	0	Thunderstorm Winds
Bourbon County	County. 06 1730-		n	0 4			Thunderstorm	Elliott County	06	1845 CST			0	3	4	0	Thunderstorm Winds
	1755 CS1 Blown down wer diameter. Nume automobiles we	re trees of :	were bl	inches	to two	1	Winds		roll One was mile	ed a mobi person b severely a east of	le home ecame p hurt. 1 Morgan	over : pinned the train on Stat	injur: under iler : te Ro:	ing to the was l ute l	hree p traile ocated 73. Th	eople. r and four e	
Madison County	06 1730 CST		0	0 3	0		hunderstorm		29 y	red was o ears old; The trai	and or ler was	ne smal: s ancho:	1 fem red b	ale c ut st	hild, raps w	10 yea ere	
	Several large blocking stree Trees were up were damaged	ets. Power o rooted in Be	utages rea. S	were nu everal v	merous.	ıd	inds	Carter County	prop	en with the erty owner. Some tr	rs repo ee top:	orted da	amage	in t n off	hat on		
Montgomery County	06 1730 CST		0	0 3	0		hunderstorm	Carrer County		s blew do		n Hitch:				-	Winds, Heavy Ra
	Large trees, throughout the and power out trees snapped	e county. Se ages were wi	veral despre	roads we ad. Upro	re bloc	.1 :ked	inds		Bran of n	s, bridge eavy rain ch, and E ain fell pepper cr y rain an	s, and s in Co verman in less ops wer	road to arter Co 's Creek s than one re also	iles vity, l k. The one he damag	were Hitch ree a our. ged f	washed ins, S ind 1/2 The to rom th	out mith inche bacco e	
Garrard County	06 1730- 1745 CST		0 blown	0 2		W	hunderstorm Inds		\$5,0	00.			-				
	Several large portion of Ga	trees were rrard County	olown :	gown in	ine nor	cner	11	Bullitt County	Tree	2140- 2145 CST s blew do erdsville	wn, blo						Thunderstorm Winds
				-					Hail	, one-qua							

PLACE	TIME - LOCAL STANDARD LENGTH OF PATH (TARDS) WIDTH OF PATH (TARDS)	PLACE	TIME - LOCAL STANDARD - SHOTH OF PATH (VARDS) - CROPS - C
KENTUC	кү	KENTUC	KY
Nelson County	06 2153 CST 0 0 0 0 Funnel Cloud	Woodford County	13 1430 EST Short Narrow 0 0 4 0 Tornado (FO)
	A funnel cloud was sighted near Bernheim Forrest moving northeast along a tree line.		A mini tornado briefly touched down damaging a house near the Buckley Wildlife Refuge, Power
Spencer County	06 2200 CST 0 0 2 0 Thunderstorm Winds Trees were blown down in Taylorsville.		lines and trees were blown down and uprooted in the same area. Roads were blocked, and as a result were closed to traffic by local authorities. Minor damage was sustained by one barn.
Nelson County	06 2210 CST 0 0 2 0 Thunderstorm Winds	Trimble County	13 1430 EST 1 0 0 0 Flooding
	Power lines and large limbs were blown down in Bardstown.		A nine year old boy drowned when he fell into Tiber Creek in Milton. The incident was preceded by
Russell County	06 2250 CST 0 0 2, 0 Thunderstorm Winds Trees were reportedly blown down in Eli.		heavy rain. Approximately 1.3 inches of rain fell in 30 minutes preceding the accident. After the rain ended, the victim and his brother were playing near the creek when the 9 year old boy fell in.
Woodford County	06 2304 CST 0 0 2 0 Thunderstorm		The rain-swollen, rushing creek, drifted the victim's body into the Ohio River.
	Winds Large trees were blown down across the southern portion of Woodford County.	Franklin County	13 1430 EST 0 0 0 0 Funnel Cloud
Pike County	10 1830- 0 0 5 0 Flash Flooding		A funnel cloud was reported over the state capital of Frankfort.
	midnight CST Flash flooding was reported by the residents of	Fayette County	13 1430 EST 0 0 0 Funnel Cloud
	Calf Creek, in the Turkey Creek area. The hillside behind one home gave away as the wall of water ""came roaring down the hollow". Water depths reached four feet in homes. One family lost all	·	A funnel cloud was sighted 50 to 100 feet above the ground moving down South Drive in southern Lexington.
	of their possessions. The county roads suffered a lot of damage. Several bridges to homes were	Fayette County	13 1432 EST 0 0 2 0 Thunderstorm Winds
	washed out and the blacktops in the Galf Creek area were washed away by the force of the water. One car was washed away and two more severely		Several small trees, limbs, and power lines were blown down in the southern sections of Lexington.
	damaged.	Franklin-Woodford County Line	13 1433 EST 0 0 0 0 Funnel Cloud
Jefferson County	11   1156 EST		A funnel cloud was videotaped while forming, by a television crew at the Junction of KY 127 and Interstate 64.
Boone County	11 1320 EST 0 2 0 0 Lightning	Scott County	13 1445 EST 0 0 0 0 Funnel Cloud
	Location: Turnabout Camp Boat Club. A father and his 5 year old son were sitting on the porch of a neighbor's camper when lightning struck the roof,		A funnel cloud was sighted near Minerville. Hail, 1/2 inch in diameter, fell at the same location.
	traveled down a pole, and struck the father and son. The father was knocked off a bench on which	Pulaski County	13 1445 EST Short Marrow 0 0 3 0 Tornado (FO)
	both were sitting. He momentarily lost his sight and hearing. The 5 year old boy was knocked to the floor unconscious. He had no pulse or heartbeat when two nurses picnicking nearby were summonmed. The nurses immediately began CFR and the small		A mini tornado briefly touched down in the Richards Court area near Somerset. The tornado dropped down over a row of houses on Crawford Avenue, felling a number of trees, leveling a garage, and dammging a roof of one home. There was damage also to a barn.
	boy was brought back to life. He was transported to Children's Hospital Medical Center in Cincinnati in good condition. Age of the father was unknown.	Laurel County	13 1445 EST 0 0 2 0 Thunderstorm Winds
Grant County	11 1340 EST 0 0 3 0 Thunderstorm Winds		Trees were blown down 15 miles west of London.
	Several trees fell in Crittenden. Tree limbs fell into power lines, resulting in electrical outages. Some of the headstones at the Crittenden Cemetery were blown over.	Jefferson County	13 1712- 0 0 0 0 Funnel Cloud 1715 EST There were several reports of funnel cloud sight- ings over the western one half of Jefferson County.
Kenton County	11 1505 EST 0 1 2 0 Lightning	Jefferson County	13 1815- 0 0 3 0 Heavy Rain 1830 EST
	A 42 year old woman of Edgewood received minor injuries when lightning struck the police dispatch communications center in Independence. She was operating the radio equipment at the time of the lightning strike.		Flooding from heavy rain during thunderstorms was reported on major main roads within Jefferson County. More than four inches of rain was recorded falling in a 90 minute period. Flooding was most significant on Dixie Highway near Crums Lane, along Preston Highway, in the
Jefferson County	13 1300 EST 0 1 2 0 Thunderstorm Winds  A few trees were reportedly blown down along with power lines in the city of Louisville. One		city of Audubon Park, along Taylorsville Road, at the intersection of interstate 64 and Cannons Lane, and at Interstate 264 between Breckinridge Lane and Taylorsville Road.
	tree, 1 foot in diameter.fell in Jeffersontown. From 15 to 20 trees were down in Audubon Park. Scattered tree damage was reported in west and southwest Jefferson County. One man was injured at a construction site by wind-blown metal.		The basement of the Delta Airline Terminal Building at Standiford Field Airport was reported as flooding from the heavy rainfall.
Franklin County	13 1343 EST 1 0 0 0 Lightning	Spencer County	13 1920 EST 0 0 2 0 Heavy Rain
	A 55 year old man was struck and killed by lightning while working in a tobacco field. The field was located just north of Owenton Road on US 421, five miles north of Frankfort. Lightning	Jefferson County	Water was flooding over the street of downtown Taylorsville. A service station in Taylorsville reported water flooding its gasoline tanks.  13 1925 EST 0 0 2 0 Heavy Rain
	struck his head, and exited through his leg, tearing his pants. Death was immediate.		Three feet of water was reported in the Metal Sales Truck Company building on Produce Lane in
Pulaski County	13 1430 EST 0 0 2 0 Thunderstorm Winds  Several trees blew down and 1/4 of a barn roof blew off in the Vaught Ridge section of northwest Pulaski County.		Louisville

	<del></del>		r	<del></del>
PLACE	TIME - LOCAL STANDARD LENGTH OF PATH (MILES) (MILES) (MILES) (MILED) (	CHARACTER OF STORM	PLACE	PATE  STANDARD  STANDARD  LENGTH OF PATH  (MILES)  WIDTH OF PATH  (MILES)  WIDTH OF PATH  (MILES)  STORM  CROPS  CROPS  CROPS  STORM  CROPS  CROPS  CROPS  STORM  CROPS  C
VENTUR	<del></del>		L	
KENTUC	CY		KENTUC	KT .
Shelby County	15 1851- 0 0 0 6 1918 EST	Hai1(1.00)	LaRue County	27 1615 EST 0 0 3 0 Thunderstorm Winds
:	60 to 65 MPH winds were reported one mile north of Shelbyville blowing down a few trees and power lines. Hail, one inch in diameter, cut a 3-mile-wide strip of destroyed crops from Chestnut Grow southeast to Waddy. Crop losses included 2,000 acres of corn valued at \$240,000; 1,100 acres of soybeans valued at \$175,000; and 250 acres of tobacco valued at \$830,000. In addition, 1,500 acres of hay and 150 acres of vegetables were destroyed.	1	Powell County	Thunderstorm winds picked up a 12 X 16 foot shed and deposited it 30 feet from its foundation.  27 1635 EST 0 1 3 0 Lightning  An 18 year old Clay City man was zapped by lightning through the telephone he was using in Clay City.  The electrical current came through the telephone, went through the right side of his body and out his foot before punching holes in the stowetop
Jefferson County	26 1540 EST 0 1 0 0	Lightning	-	and clothes dryer. The shock sent him to the floor and left him numb for a while. The kitchen that
·	An 18 year old male clubhouse attendant at Shivel Municipal Golf Course was knocked off his feet wh electricity from a lightning bolt passed through the telephone that he was holding. He was treated at a local hospital for shock.	en		he was in, lit up with fire sparks. Lightning did some uninor but obvious damage just outside of the kitchen's back door. A large tree showed signs of the lightning strike. Small pieces of bark were scattered throughout the yard. Clothesline posts in the yard were shattered.
Kenton County	26 1805 EST 0 0 4 0	Thunderstorm Winds	McCracken County	27 1700 EST 0 0 2 0 Thunderstorm Winds
	Thunderstorm winds blew the roof off of The Stripper Furniture Store at 10th Street and Russell Avenue in Covington. Reports of tree limb trees, wires, and roof shingles were all a part o			Trees were blown down at Jefferson Avenue and Central Street in Paducah. Power lines were also blown down.
	the storm damage.	•	Ballard County	27 1730 EST 0 0 0 0 Funnel Cloud
Boone County	26 1810 EST 0 10 6 0	Thunderstorm Winds, Heavy Rain,		A funnel cloud was sighted 5 miles west of Lovelaceville.
ı	Ten people sustained minor injuries when 1/2 of the roof of the Florence, Kentucky, Thriftway Store collapsed. Investigation proved the accumulation of heavy rain on the roof caused the collapse. 2.34 inches of rain fell in 40 minutes. Large hail also fell, averaging golfball size to slightly larger. Windows on the front of the store were blown outward into the parking lot	Hail(1.75)	Ballard County	27 1745 EST 0 0 2 0 Thunderstorm Winds Trees were blown down two miles west of Kevil near Highway 60.
	Several trees were blown down in the three to fou block area to the southeast of the store. Damage to the building and its contents was listed at 1 million dollars.		16 LOUISIANA	01 0715CST 0 0 ? 0 Flash Flood
Henry County	26 1940 EST 0 0 2 0	Thunderstorm Winds	curcus reu Tarrisii	Street flooding due to runoff from localized heavy rain was reported
Shelby County	Trees were reported down in the county.  26 1950- 0 0 3 0 2000 EST	Thunderstorm Winds	East Baton Rouge	in the south portion of Lake Charles. One home was inundated with flo water. The NWS office at the airport recorded around 4 inches of rain between 0500CST and 0700CST.
	Thunderstorm winds blew the top off of a tool she near Chestnut Grove. Trees and power lines were blown down around Finchville.	ed.	Parish	01 1115CST 0 0 5 0 Thunderstorm Wind  A downburst from a thunderstorm toppled several large trees and shattered large plate glass windows at an auto dealership in Baton Rouge. Flying debris also caused damage to 20 new automobiles
Jefferson County	26 2025 EST 0 0 3 0	Thunderstorm Winds	<u> </u>	at the dealership.
	A tree fell on a car and pulled power lines down on Grade Lane in Louisville. Large limbs also fell in the same area.		Rapides Parish	01 1430CST short 10 0 0 ? ? Tornado (FO)  A small tornado touched down about 5 miles southwest of Alexandria, damaging a tomato and bean crop and causing structural damage to a
Mercer County	26 2030 EST 0 0 4 0	Thunderstorm Winds		storage building.
	Thunderstorm winds knocked down a 350-foot-long wall that was from 21 to 24 feet high on the new Kroger store on US 127 near Harrodsburg. A metal roof was ripped off of the Chimney Rock Marina on Harrington Lake. Several large branches		Calcasieu Parish	02 1655CST 0 0 ? ? Thunderstorm Wind  An NWS employee reported that strong gusts associated with a thunder- storm in Lake Charles moved a large shed from its foundation and drove a board into a tree.
Estill County	were torn from trees. 26 2030 EST 0 0 4 0	Thunderstorm	Jefferson Parish	04 1600CST 0 3 ? ? Thunderstorm wind
,	Trees from 3 to 4 feet in diameter were uprooted limbs were torn down, and a radio repeater was knocked out at Chestnut Stand. Lightning struck and destroyed one house on Crooked Creek Road.	Winds, Lightning	Catahoula Parish	Strong thunderstorm winds flipped over a carnival booth and temporarily turned over an inflatable carnival ride at Lafraniere Park in Kenner. Three people suffered minor injuries.  05 1830CST 0 0 ? ? Thunderstorm wind
Fayette County	Both incidences were in Irvine. 26 2032- 0 0 3 0	Thunderstorm	Concordia Parish Franklin Parish	05
	2045 EST Trees were reported blown down in various locati of Lexington. Roads were blocked by downed trees and power lines at KY 922 and 353, on north Broadway, US 25, and at Euclid and Rose near the	1	St. Bernard Parish	Thunderstorms developed over much of the three parishes during the early evening hours, producing strong wind gusts which toppled trees and damaged power lines. Approximately 1500 homes were without electricity for several hours.  On 1100CST 0 0 4 0 Thunderstorm wind.
Breathitt Count	University of Kentucky campus.  26 2230 EST 0 0 4 0	Lightning	Ju. Dernard Parish	06 1100CST 0 0 4 0 Thunderstorm wind, Heavy rain
Breathitt County	26 2230 EST 0 0 4 0  Lightning struck an unoccupied house 1.5 miles east of Quicksand, resulting in a total fire loss	Lightning		A severe thunderstorm produced straight-line winds which tore the roof off a townhouse in Chalmette. Street flooding and downed power lines were also reported in the Chalmette area.
Boone County	27 1430- 0 0 0 0 0 1445 EST	Funnel Cloud	Ascension Parish	06 1215CST 0 0 ? ? Thunderstorm wind Louisiana Highway Patrol reported trees damaged and power lines down as a severe thunderstorm moved through the Dutchtown area, about 18 miles south-southwest of Baton Rouge. Several greenhouses were heavily damaged by the storm.

	1		T		_					r	Ι-	1	T	Τ	Τ.				
		CAL	РАТН	Ŧ		. OF	ESTIM. DAM					CAL	PATH	≇		OF SONS	ESTIMA DAM		
PLACE	DATE	TIME - LOCAL STANDARD	LENGTH OF I	WIDTH OF PATH (YARDS)	KILLED	INJURED	PROPERTY	CROPS	CHARACTER OF STORM	PLACE	DATE	TIME - LOCAL STANDARD	LENGTH OF 1	WIDTH OF PATH (YARDS)	KILLED	INJURED	PROPERTY	CROPS	CHARACTER OF STORM
LOUISIAI	NΑ									LOUISIAN	NA								
Ouachita Parish	06 18	800CST			1	0	Λ	0	Thunderstorm wind	Franklin Parish	30	1540CST			0	0	?	?	Thunderstorm Wind
ougenica ration	A thun	derstorm ck Bayou	Lake,	about 1	ong w 7 mil	rind gr es nor	rth-no	hich c rtheas	overturned a boat t of Monroe, A	Franklin Parish Caldwell Parish Tensas Parish								? ? st Loi	Thunderstorm Wind Thunderstorm Wind Thunderstorm Wind isiana during the
Acadia Parish	1	030CST rstorm w	ind gus	sts tor	0 e the	0 awni	0 ng fro	m a ho	Thunderstorm wind		down down home	and a ca burst des s at Wisn	rport i troyed er at i	was dama two mot around	aged a bile h 1555CS	t ard omes T, I	ound 15 and da Numerou	40CST, maged s tree	trees were blown and an apparent two other mobile s were toppled heast of Grayson
Cameron Parish			was re	eported	0 ! 22 n	0 niles:	0 southe		Funnel Cloud Lake Charles	Allen Parish		just nort				0	. ?	?	Thunderstorm Wind
Cameron Parish	16 0 Straig	902CST						troyed	Thunderstorm wind  I a barn roof and te Lake.	Vernon Parish	30 The in 0	1815CST sheriffs	hile S	tate poi	lice r	epor	ted tre	orm wi	Thunderstorm Wind nds toppled trees oss the road in
Jefferson Davis Parish Vermillion Parish		330CST el cloud 40CST	l was s	potted	0 just	0 south	0 of Je	ennings	Funnel Cloud  Funnel Cloud	Rapides Parish	Thun down also	ed power	lines ower 1	just noi ines 6 r	rth of miles	Alex	xandria	trees . Thu	Thunderstorm Wind in Gardner and inderstorm winds a and caused a
	Vermil associ	lion Par	h a sti	rong th	under	rstorm	near	a funr	el cloud meron-Vermillion	Red River Parish Natchitoches Parish	31 31	1355CST 1400CST			0	0	?	?	Thunderstorm Wind Thunderstorm Wind
East Baton Rouge Parish	Lightn	400CST ing stru ng in Ba			0 intial	0 Ily dan	? naged		Lightning of of a 12 story		thun Clea	r Lake.			t-sout	heas	t of Co	ushat1	a and near
Lafourche Parish	25 1 Strong of a g	900CST wind gu rocery s	sts fro	om a th	0 iunder idaux .	3 rstorm Thre	? broke e peop	a pla	Thunderstorm wind te glass window fered minor	Webster Parish	An a							den ro	Thunderstorm Wind olled one mobile its foundation.
St. Tammany Parish	injurio 26 1:	es. 350CST			1	3	0	0	TSTM wind (51)										
	the eas a 26 fi Slidel thrown occupan boat on	stern po oot sail 1. The b into th nts rece ccupants	rtion of boat ap oat did e water ived mi were w	of Lake pproxim d not c r. One inor in wearing	Ponc ately apsiz man jurie	chartra cone a ce, how drowned sonal	ain te and a wever, ed whi were flotat	mporar half m the fo le the rescue ion de	thunderstorm over illy knocked down illes south of our occupants were three other id. None of the vices (life	17 MAINE Oxford Co. Bethel	Lig	1300EST ghtning st			0 ar-olo	0 d bar	5 n, sett		Lightning ton fire and
	accide	nt site	recorde	ed sust	ained	l winds	of 3	8 knot	tion near the s (44 mph) and e accident. M260	Franklin Co.	1	1400EST	o the	gi ounu .	0	0	5	0	Lightning
St. Charles Parish	1	630CST	ıck a t	ree in	O a pa:	0 sture	3 near I		Lightning Jemands. Five		des	stroyed th	ne barn	and sp	read t	o th	e adjoi	ining I	on fire. The fire nouse before it was novated recently.
Ascension Parish	head o	of cattle 1700CST	e hudd1	ed bene	eath o	the tr O	ee wei	re kil	led. Thunderstorm wind	Somerset Co. Solon		1700EST severe thu	ınderst	orm pro	0 duced	0 wind	4 s that		TSTM Wind several trees out
	trees	erstorm w in Sorre	ento.	Power 1	lines	were	nce si downer	tore m	oof and toppled trees toppled in	·	of 201	the groun	id, kno iours.	cking d One tr	own po ee cru	wer	lines,	and b	locking U.S. Route fell on a house,
East Baton Rouge Parish	Lightn	1800CST	uck an	electro	0 onics	0 shop	6 in Ba	0 ton Ro	Lightning uge,subsequently	Cumberland Co. Bridgton	A s	naging 12	utilit	orm pro y poles	0 duced and o	0 wind disru	4 s that pting e	0 took lectr	TSTM Wind down several trees, ical service for
Franklin Parish	28 1 A thun	iff anoth	ı downbi	urst ro	0 olled ne and	0 over d caus	4 one mo	0 bile !	Thunderstorm wind nome, ripped the operty damage	Oxford Co. Hiram	26	veral hour O500EST severe thu		orm pro	0 duced	0 one	1 inch to		Hail (1.5) pall size hail.
Livingston Parish	at Tur 28 1	key Cree 630CST	ek Lake	near W	lisne: 0	r. 0	4	0 1	Thunderstorm wind	Androscoggin Co. Auburn	A s	0530EST severe thu	ınderst	orm pro	0 duced	0 wind	5 s that	were i	TSTM Wind estimated to be at re power was lost.
		trees ne							r uprooted several ged two mobile		Abo Air	ut \$50,00	00 dama everal	ge was ( trees w	done t ere bl	o ai	rcraft	at the	e Auburn-Lewiston city, one badly
Calcasieu Parish	The pu	515CST blic rep ed trees	orted	a torna				down	Tornado (F1) near Holmwood, e.	Somerset Co. Long Falls Dam	A s	1330EST severe thu on Flags	inderst staff L	orm prod	0 duced	0 go1f	1 ball si		Hail (1.5) il at Long Falls
Caddo Parish	A down metal	storage	buildi	ng at a	a lumi	ber ya	rd in	ted the Shreve	Thunderstorm Wind e roof off of a eport. Flying earby parking lot.	Lincoln Co. Jefferson	A s	1500EST severe thuser lines.		orm pro	0 duced	0 wind	3 s that		TSTM Wind down trees and
		ent 91			- 34			= *!"		Knox Co. Rockland	Α:	1500EST severe the e Rockland			0 duced	0 wind	1 Is that		TSTM Wind (60) d to 60 knots at

					_				, ·	,									JULY 1987
PLACE	DATE	TIME - LOCAL STANDARD	LENGTH OF PATH (MILES)	WIDTH OF PATH (YARDS)		SONS	PROPERTY	ATED†	CHARACTER OF STORM	PLACE	DATE	TIME - LOCAL STANDARD	LENGTH OF PATH (MILES)	WIDTH OF PATH (YARDS)	KILLED	OF RSONS	PROPERTY PWWD PWWD PWWD PWWD PWWD PWWD PWWD PWW		CHARACTER OF STORM
	.k				1	-		L	·	19 MASSACHUS	ETTS	;	<u> </u>	1.	1 .				
Somerset Co. Hartland			ndersto	rm pro	0 duced	0 golft	1 Dall si		Hail (1.5) .	Easton, Norton, North Attleboro, and Taunton	Light Easto brick	n and s chimne	rikes tarte y was	dam heav	ajor ily (	fire damag	in No ed in	to to rton. North	ightning wo persons in A historic Attleboro
Androscoggin Co. Lewiston  Penobscot Co. Orrington	A se	1915EST evere thun 1915EST evere thun			0	0	1	ze hai O	Hail (1.5) 1. Hail (.75)		after Taunt churc year knock sever bicyc ment	a bolt con, light ch. The old marked to to teen-yearle. Bo Scatterea. The	of lyhtnin injur who he gr ar-ol oth we tered The li	ightn g pun ies i was s ound d you re ta power	ing locked n East tand: by a th wi ken tout ng-i	a hoston of the stone of the st	a hole le in occurr n his of li s knoc local were r d fire	in in the red to yard a ghtnin ked on hospite eporter in No.	t. In one for a a fifty-two and was ng, and a eff of his tal for treat- ed throughout orton caused
18 MARYLAND	and	D.C.		•			•			Berkshire County, Williamstown and North Adams	A pow Will: out o	local of 1715- 1730EST werful of iamstown car wind ed only	lownbu n and lows, a min	rst w North and t ute o	o ind Ada oppl r tw	0 ms, u ing a o dur	4 throug prooti bill ing a in. I	0 T h por ng tr oard. sever n Nor	ce building  STM Wind (80)  tions of ees, blowing The wind e thunderstorm th Adams,
County	Wind Airp Quar were inch	ort, rip ter-inch damaged es in a	pping n diam d by f 20 mi	a 30 eter : allin nute	foot hail g tre perio	roof was es. d fe	sect repor Heav	ingto ion o ted, y rai Up to	Thunderstorm Wind (61) n International ff a terminal. and 2 houses ns of 1.3 20 cars were parking lot.	Norfolk County, Weymouth; and Plymouth County, Hingham	25 A bo of the	evening  It of 1:  ne Weymout injuicting so	ightni outh p iry to truck	ng se	es a ont s radi	nd se  0  parks io in o ope ransm	3 flyir the r rator.	0 L g fro police In line	ightning m the console station, but Hingham, , knocking out for several
•	A st over		travel	trai				e Par	Thunderstorm Wind k, blowing pop-up campers.	Nantucket County	Ligh man, fire	topple which	d chim heavil	neys v dam	a h from	seve	ral ho	erstor omes,	ightning m injured one and ignited a nineteen-year-
Washington County	Thun resu gust	derstorn lted in	ms occ repor	ts of	3/4	inch	diam	m and eter	Hail (0.75) midnight EDT hail. Wind r damage was		old off hosp the a ma	youth we the bed ital. Seedroom tress seek and a	as str , and The bo and t starte	ruck b subse olt ap hen t d smo	y li equen pare hrou ulde	ghtni tly t ntly gh th ring	ng whi aken i trave e bed. after	le in the lled d In the h	bea, knockea
District of Columbia	Hail were	reporte	-inch	Natio	nal A			0 peaki	Hail (1.00) Thunderstorm Wind (47) ng at 47 knots understorm										
	-	ed acros		area		•		•	Thunderstorm	20 MICHIGAN									
Allegany County	Wind at t		knots gany C	ounty	Fair	grou		an en	Thunderstorm Wind (53) trance tower s and power	Grand Rapids, Kent Co 3 SW Lowell 8 S Ithaca,	3.89 89		D. 1	20	0 0 0	0 2 0	8 3 8		Hail (0.75) Lightning Tornado (F1) Hail (0.75)
Dorchester County		afterno		rain	0 eleva	0 tor	? was t		Thunderstorm Wind d, a car was	Bratiot Co. Ionia Co. 3 NW Ionia Isabella Co. 8 S Ithaca	89 89	1208EST 1210EST 1210EST 1232EST			0 0 0	8 8 8	0 0 0 2		Thunderstorm Wind Funnel Cloud Lightning Thunderstorm Wind
Entire State	move mapl over 17 Temp occa 103° Hosp prob chic Peni	d, a pire tree to onto a 9-14 day eratures sionally F on the itals relems. Ne diensula appropriate annula ap	vot ir was bl bulld ys s were y in e e 21st eporte ear th ed; th	rigat own o ozer well xcess ; Fro d a s e sta e tot hed 1	ion s ver, by th 0 into of 1 stbur light rt of al de mill	o the oor for the	m was a tra arstor 5 8 90 s a aked crease heat for chick	twis iler m win  4 (°F) ltimo near in h spel the D ens w	ted, a huge was flipped ds.  Heat Spell and re City was 99°F. eat stress 1, many elmarva hich was		a bui down deale was c was i was i parti vehic and s Pleas	was mind lding in several ! rship. A ut when ! njured b' ifted of ally des' les were everal bi ant, Trei haca.	Grand trees a man ru ne smas y falli f the b troyed damage	Rapids nd ser naing hed th ng roo uildin when i d. A s	. The ious! from rough f mat g. It t slamakes set	Lowel y dama the ap a win erial. and a mmed b tack w afire	l torna ged an proath; dow. An The en wall w ack dow as dest by ligh	do ble auto ng funother tire rere n. 6 royed thing	nel pof in Mc.
Prince Georges County	27 Thun Hail repo	e of 5 m 2245EST derstorm of 3/4	millio ms mov inch	m kilder with the second of th	owats 0 rough ter a	0 the	the 2 ? coun	lst. ? ty ar	cord power  Hail (0.75)  ound midnight.  to size was  were also	3.5 SE Granite Island, Lake Superi Teal Lake, Marquette Co. 3 EME Munising to 6 NE Munising, Alger Co	09   09   09	1330EST 1400EST 1650EST		400	8	0 8	8	bo C	Waterspout Funnel Cloud Tornado (F1)
	Labo	iceu.		,							at le torne golf area, fell trees rolle kenne	ous fundations do touch course a Along Uto the n became dover, al was pall unharme	of which ed down nd move he firs ortheas twisted 4 house rtly de	h tauc on the d nort it 1.8 it. The l and s es were	hed te nor heast miles on the hredd dama	he wat theast throu of tr track ed. A iged, a	er. The corner of ack, tree ack, tree ack, tree ack, tree ack, tree ack, the miner ack, the miner ack, the miner ack, the ack, th	Munis of a prested es all ened an home w mmerci	ing d as al dog

PLACE	DATE	TIME - LOCAL STANDARD	LENGTH OF PATH	WIDTH OF PATH		D. OF RSONS		ATED¹ AGE	CHARACTER OF STORM	PLACE	DATE	TIME - LOCAL STANDARD	LENGTH OF PATH	WIDTH OF PATH (YARDS)		INJURED SAOS	PROPERTY		CHARACTER OF STORM
MICHIGA	٩N					1	L			- MICHIGA	٩N	<u> </u>	<b></b>				· · · · · ·		
teland, teelanau Co. teelanau Co.	89	1300EST 1300EST			8	1	0	C	Lightning Hail	4 SW West Diive to 3 ENE West Diive,	89	1945EST	7.5	50	0	0	3		Tornado (FB)
Benzie Co.	l	1330EST			0	0	6		Hail (0.75) Thunderstore Wind	Dttawa Co. Hudsonville,	09	1949EST			8	0	9		Thunderstora Wind (54)
torthwest Antria Lo.		1 <b>488E</b> ST struction	n worke	rnea	r the	Lake M	-	n shor		Ottawa Co. Grandville, Kent Co. Kentwood, Kent Co.	89 89	2015EST 2030EST			9	9 2	2 5		Thunderstore Wind Thunderstore Wind
	was in	njured by tton's Ba	, light	ning.	A swa	th of	hail f	rom Ce	dar	,	The	West Dlive							
Hastings, Barry Co.		1338EST			0	0	0		Thunderstare Wind		trac tree	igan, heav k was al <b>ao</b> s downed a	st ent it road	irely s and	throug fence	h ope lines	n field . No co	s, wit	th ous
Bull Lake, Kalamazoo Co.		1345EST			0	1	9		Lightning		unde		tion w	as blo	own do	en in	Kentwa	d, and	d 3 garages
4 N Battle Creek, Calhoun Co. Battle Creek Airport	l	1357EST 1410EST			9			( 6	Thunderstorm Wind g)Thunderstorm Wind			destroyed	and a	nause	e damaç	jed by O	4	ing ti	Lightning
(alamazoo Co.	89	1410EST			0	9	8		Thunderstorm Wind	Oscoda, Iosco Co.		use and it	s cont	ents +	iere di	estroy	ed by 1	ire.	
	A boy in Gu Creek	ling tree was crit ll Lake. . Trees : rn Kalama	tically Power were bl	inju lines own d	red by were	light dawn n	aing a arth a	ın an i ıf Batt	sland le	Western Wayne Co. Grosse Pointe, Wayne Co.	10	1400EST 1415EST			8	8	6		Flash Flood Lightning
2 SSE Elmira,	29	1345EST			ø	а	Я		Funnel Cloud		West	ous local land, Dear set afire	barn.	and De	earbori	n Heig	hts. 3	houses	5
Otsego Co. 4 NE Grayling,		1415EST	18.4	40	, - a	0	2		Tarnádo (F1)		down	along a n Dearborn H	arrow	swath					
Crawford Co. to 7 N Red Oak, Oscoda Co. Crawford Co.	۱,,	1440EST				a	۵		Hail (0.75)	2 SE Westphalia,	10	1657EST	1.0	15	0	1	4		Tornado (F8)
LIZATORU CO.	l	police (	observe	d a f	unnel	cloud	narthe	ast of	Nail (6:/5/	Clinton Co. Battle Creek,	10	173 <b>8</b> E5T			0	0	1		Thunderstorm Wind
	north	ing. It e east. Tr	ees and	powe	rlines	were	ripped	l upan	d	Calhoun Co. Eaton Co. Lansing, Ingham Co.	10	1759EST 1800EST			8	0	3		Thunderstorm Wind Thunderstorm Wind
	and g to th	unoccupie rounds wi e clubhoe a County.	ere tor use at	n up	and th	ere wa	s mind	er dama	ge	Lansing, Ingilas co.	The dama	Westphalia ged 2 othe ine was bl	rs, A	man at	teapti	J 2 au ing to	tbuildi cover	a fare	nd 1
DeWitt Twp, Clinton Co.	<b>2</b> 9 :	1418EST			9		3		Thunderstore Wind	ł	fuan was	el and hea carried up	rd ar to 25	oaring D feet	noise . Barr	. Str Is wer	uctural e destr	debri oyed	is
Delta Twp., Eaton Co. Northwest Livingston		1435EST 1450EST			8	0 e	3		Thunderstorm Wind Hail (1.00) (66)		road	ind in wes s througho s were rep	ut the	area.					
Co. Howell, Livingston Co. Lansing, Ingham Co.		1450EST 1520EST			0	9	8		Funnel Cloud Thunderstorm Wind					•					
	up to Clint	n was set 2 feet i on and no ed in Cha	in diam ortheas	eter e tern E	ere b	lown d	own in	south	ern	Gogebic Co. Houghton Co. Airport Allouez, Keweenaw Co. to Lake Linden,	11	1130EST 1218EST 1245EST	6.0	25	0 0 8	8 8	2 8 3		Thunderstorm Wind Thunderstorm Wind Tornado (F0)
Allegan Co.	09	1510EST			8	9	3		Thunderstorm Wind	Houghton Co. Republic, Marquette	11	133 <b>0</b> EST			8	9	0		Funnel Cloud
-	Monte	2 foot tr rey, othe carried c ng tree s	erswer up to	e spli 500 f	it by eet, a	lightn ne bro	ing. B ke a g	ranche	5	Co. near Alpha, Iron Co. Neguance, Marquette Co. Gwinn, Marquette Co.	11	1333EST 1400EST			8	В В	4 8		Lightning Hail (0.75) Funnel Cloud
Richland Twp.,	<b>B</b> 9	1450EST				В	4		Lightning	1 S Vulcan, Dickinson Co. to Cooks,			84.0	158	0	8	4		Tornado (F3)
Genesee Co. Millington,	l	1538EST			8	0	4		Lightning Lightning	Schoolcraft Co. Bark River, Menominee Co.	11	1525EST			8	. 0	2		Thunderstorm Wind
Tuscola Co.		50 WAS 50	et afir	e in (	Senese	e Co.,	and a	n inn		Green Bay, off Menomines Co.	11	1545EST			8	8	8		Funnel Cloud
	121111	ngtan.								4 N Eckerman Chippewa Co. St. Ignace, Mackinac	11	1730EST	2.0	509	0	8	2		Tornado (F0) Thunderstorm Wind
Lowell, Kent Co. 5 N Lowell		1880EST			9	8	8		Hail (0.75) Hail (1.75)	Co. Cheboygan Co.	11	1730EST 1800EST			8	8	2		Thunderstorm Wind (52) Thunderstorm Wind
2 N Chesaning to 10 ENE Chesaning,	89	1820EST	B. Ø	1000	8	D	8		Hail (0.75)	Sault Ste. Marie, Chippewa Co.		1839EST			9	8	2		Thunderstore Wind
Saginaw Co. Bitely, Newaygo Co.		1825EST			8	0	1		Thunderstorm Wind		at t	rage was d he touchdo threw a l	на роі	nt of	the Al	louez	tornac	o. It	anah
Montcals Co.	l	1915EST			0	8 a	8		Funnel Cloud Thunderstore Wind		a fa	rming comm uprooted	unity,	turnin	g over	надо	ns. Man	y tree	!\$
contcale-lonia county line reenville,	l	1930EST 1957EST			8	8	9		Hail (0.75)		home	was rolle both ends	d over	at the	e end k saw	of th the r	e track otating	. Pers	ions
Montcala Co.	Trees	were blo				t the	area.	Lightn	:		put and Coun	heard a ro a Marquett its conten ty. The Vu k mostly t	e radi ts wer loan t	o stat e dest ornado	ion of royed had a	if the by li a long	air. f ghtning , nearl	wareh in Ir y cont	ron Linuous
	I										dest The line seve Anot nort	rbyed and tornado cr at U.S. 2 ral outbui her house hern Menom	roads ossed near ldings was de inee C	were t the Di Cunard were stroye ounty	ckinson ckinson de la transportant de la transporta	i by t in-Men i22EST ed at an iso i0EST.	rees ne ominee . A hoo this lo lated a The fu	ear Vul county se and cation rea of innel	lcan. / i
											Tree into it w as "	crossing s were dow a farming as seen by like a tho ing". A la	n at to area at le usand	hat po 7 mile est 15 tires	int. 6 s west perso stacke	t 162 of G	DEST it ladstor t was o	e, who	i ere

																	JULY 198	
	CAL	РАТН АТН		O. OF RSONS		ATED!				CAL	PATH	Æ		D. OF RSONS	ESTIM. DAM		ı	
PLACE	DATE TIME - LOCAL STANDARD	LENGTH OF PAT (MILES) WIDTH OF PATH (YARDS)	KILLED	INJURED	PROPERTY	CROPS	CHARACTER OF STORM	PLACE	DATE	TIME - LOCAL STANDARD	LENGTH OF F	WIDTH OF PATH (YARDS)	KILLED	INJURED	PROPERTY	CROPS	CHARACTER OF STORM	
MICHIG	AN							MICHIGA	AN	1	<u> </u>	1						<u>-</u>
	area had a pat	of destruc	tion :	1 <b>00</b> yar	rds wi	de and	at	Boughton Lake,	23	1630EST			8	8	2		Thunderstore Wind	d (5
	least a mile looked more li							Roscomman Co. Houghton Lake	20	1638EST				8	9		Waterspout	
	trees and mino on the track w	damage to	many t	buildin	ngs. F	ron th	is point	Alcona Co. Montmorency Co.	20 20	1630EST 1645EST			8	8	2 2		Thunderstore Wind	đ
	wilderness. At down at Cooks.	1725EST sev	eral b	auildin	igs we	re kno	ked	Oscoda Co. Muskegon Co.	28 29	1700EST 1705EST			B 9	0 B	2 3		Thunderstore Wind	
	speed was a co seen just prio							Iosco Co. West Branch, Ogemaw	20 20	1710EST 1714EST			0 B	8	2 3		Thunderstore Win-	
	touched down o were damaged.	The path wid	th var	ried ex	treme	ly, up		Co. Gladwin Co.		1715EST				8	4		Thunderstorm Win	
	to 1/3 mile. T Marie. Peak gu	st at the mu	nicipa	al airp	ort w	as 48	nph.,	Montcalm Co.	29	1715EST 1715EST			9	8	2		Thunderstorm Win-	d (:
	at the S. S. M wind and light	ning damage	in Chi	eboygan				Teabella Co. Kent Co.	28	1720EST 1730EST			0	8	4		Thunderstore Win Thunderstore Win	d k
	3 boats capsiz	ed on inland	lakes	5.				Arenac Co. Midland Co.	20	1732EST			8	8	9		Thunderstore Wind Thunderstore Wind	4
near Hudson,	11 1314EST		0	0	8		Hail (0.75)	near Ithaca, Gratiot Co. Ottawa Co.	20 20	1759EST 1800EST				в.	2		Thunderstare Win	
Lenawee County								Bay Co. 3 # Caseville,	20	1807EST 1818EST			8	8	2		Thunderstore Win-	d (5
4 WSW De Tour Village	12 1523FRT	5.1 40	9	0	2		Tornado (F1)	Saginaw Bay Saginaw Bay off	-	1015EST			1	P			Waterspout Thundagetore Miss	اأر
to 2 NW De Tour Village, Chippewa			-	-	-			Sebawaing Haple Rapids, Clinton		1820EST					4		Thunderstorn Wind	il.
Co. St. Ignace,	12 1535EST	*	8	2	8		Lightning	Co.	28	1824EST					2		Thunderstore Wind	1
Mackinac Co.	The tornado fu	nel was fir	_		Lako	Rucon		Omosso, Shiawassee Co Allegan Co.	20	LB30EST			8	0	2		Thunderstore Wind Thunderstore Wind Thunderstore Wind	ď
	It touched dow There was a ne	, or came a	shore,	, at De	etour	State :	ark.	5 SW Allegan Barry Co.	20	1830EST 1830EST			8	0	ē 2		Funnel Cloud Thunderstorn Wind	
	of the peninsu the surface as	a to Sweet'	s Poir	nt. It	was s	till o	1	Genesee Ca. Ionia Co.		1834EST 1848EST			8	0	2		Thunderstore Wind	ď
	River. There w One house, und							Freeport, Barry Co. 3 N Orangeville,		1848EST 1845EST	0.4	28	0	0	3		Thunderstora Wind Tornado (FB)	
	heard a sound to trees was 1	ike a train	. The	path o	of min	or dam	ige !	Barry Co. Calhoun Co.	20	1845EST			8	8	3		Thunderstore Win	الة
•	was at its nor station 2 mile	hwestern bo	rder.	An aut	tomati	c weat	ner i	East Lansing, Ingham	28	1850EST				8	2		Thunderstore Win	١١٥
	mph gusts. 2 p were injured b	ersans warki	ng out	tdoors	in St	. Igna		Eaton Co. Van Buren Co.	28 28	1953EST 1900EST			8	0	2 1		Thunderstore Win-	4
	12 1600EST		0	0	2		Thunderstorm Wind	Jackson Co. Berrien Co.	20	1905EST 1910EST			8 B	1 0	3 2		Thunderstore Wind Thunderstore Wind	d C
Southeast Montmorency Co.									20	1928EST 1925EST			1 B	8	2		Thunderstorm Min Hail (0.75)	d
	Many trees fel homes.	, demaging	cars,	cabins	s, and	mabil	1	Jonesville, Hillsdale Co.	ŀ	1925EST					1		Thunderstore Wind	- }
	12 1625EST		8	0	3		Thundestorm Wind	Fowlerville, Livingston Co. Hartland, Livingston		1925EST 1938EST				e e			Thunderstore Wind	١
Gladwin, Gladwin Co.								Co. 2 SE Ortonville,	ľ	1933551							Funnel Cloud	ł
Genesee % Tuscola Cos	12 2000EST		ø	и	8		Thunderstorm Wind (52)	Dakland Co. Oakland Co.	20	L935EST			- a				Thunderstore Wind	.
Parries AED	18 2120EST		8	8	0		Thunderstorm Wind (56)	2.5 Armada, Macomb Co Wayne Co.		1950EST 2015EST			e L		3		Funnel Cloud Thunderstorn Wind	- 1
Sawyer AFB								Northville, Wayne Co.	28	2015EST 2015EST	<b>a.</b> 1	20	8	8	2		Tornado (FB) Funnel Cloud	
Iasco Co.	19 1635EST		0	Ð	3		Thunderstorm Wind		20	2030EST 2030EST			8	0	1 0		Thunderstorm Wind Thunderstorm Wind	٥
	State police r Lake Corners a	d M55. Tree	s and	buildi	ngs w	ere bl	awr.	Northern Hillsdale Co	1	2830EST			8	•			Thunderstare Wind	
	down. The path damage appeare					ing". i	11)		in Be	ldren wer nzie Co.	26 boat	S CADE	ized	an Gra	ind Tra	VAFER	P	ł
S	00 4005507						Thunderstorn Wind		was t	2 women d	its mod	rings	and d	etrove	d in T	Favers	•	
	20 1205EST 20 1330EST		0	0	0		Funnel Cloud		sudde	Swimmers only near load. A mai	Maniste	e. Seb	awain	o. Kal	364200	. and		
near Swinn, Marquette Co.	20 1333EST		0	B	0		Thunderstorm Wind		There	was a na lanta, 2	rraw pa	th of	downe	d tres	s 8 ai	les na	rth	
	20 1348EST		8	0	9		Thunderstorm Wind		Muske	gan. Rotal	ting cl	ouds w	ere s	een in	Arena	c Coun	ear ty.	
	20 1355EST		9	0	2		Thunderstorm Wind		a Gre	enville-V	estabur	o line	. Bui	ldinas	MOTA	danaon	i .	ı
	20 1410EST		8	0	2		Thunderstorm Wind		in Gr and a	and Haven boat caps	. In lo sized o	inia Co in Long	unty .	a tree	fell rnado	on a ti waa	ruck	
	20 1430EST		8	8	2		Thunderstorm Wind		seen	touching of County. S	down br	iefly	on Gui	n Lake	is we	ctorn	·e.	
Bark River, Delta Co.	20 1445E5T		8	8	9		Thunderstore Wind	1	A man	was injur g car. A p	red in	Jackso	n wher	n a tr	ee fel	l on a	V= -	
	A mobile home - Escanaba. A sm								south	g car. H ; of St, Jo politan A	oseph.	3 mile	s nor	th of	Detrai	t		1
	and power line was killed in	n auto acci							down,	pick up a e hane. Fi	а сапре	r top,	and 4	saash				
	Gogebic County			•	ĺ					1710EST				8	3		Thunderstore Wind	6
ool an au Co	20 1500EST				,	4	Thundaest Wi-d	9 W Detroit, Wayne Co	Signs	and brane	ches we	re blo	un do:	- wn alo	ng Sou	thfile	1	
ake Ann, Benzie Co.	20 1510EST		0	8 6 8	2	4	Thunderstorm Wind Thunderstorm Wind Thunderstorm Wind		betwe	en Rotunda	a and F	ord. U	nderp	*****	mere f	2 ooded	•	
Traversa Co.	20 1533EST	-	8	8	A A	4	Thunderstorm Wind (78):	Ypsilanti, Washtenaw	22	1551EST			8	2	0		Lightning	
ake Michigan, off	28 1550EST 28 1600EST		2	6	•		Funnel Clouds Thunderstore Wind	Co.	2 con	struction	warker	s were	inja	red.				
Mariakas	28 1688EST	•	e	a	3		Thunderstore Wind			1985EST			•	8	2		Thunderstore Win	
Manistee Nissaukee Co.	20 1000131																	
Nissaukee Co.	20 1610EST		8	8	8		Funnel Cloud			s and seve							<b>(5</b> 2)	2

	<del></del>		JULY 198
PLACE .	TIME - LOCAL STANDARD LENGTH OF PATH (MLES) MICH OF PATH (MRES) MILLES MICH OF PATH (MRES) MILLES CROPS CROP	PLACE	DATE TIME - LOCAL STANDARD LENGTH OF PATH (MILES) WIDTH OF PATH (TARDS) CROPS
MICHIG	AN [	MINNES	OTA
Port Huron, St. Clair Co.	24 1640EST 0 5 0 Lightning  Coast Guardsmen standing on seawall ware struck.	Waseca Co. 1 S Janesville Waseca	10 0040CST 0 0 4 0 Thunderstorm Wind 10 0110CST 0 0 5 0 Thunderstorm Wind
Kalamazoo and Barry Cos. Kalamazoo Co:	28 1630EST B 2 3 Lightning A woman in Kalamazoo and a man in Orangeville were struck		(79) Winds blew over a shed at a farm site just south of Janesville. A gust of 91 miles per hour was measured in Waseca. The wind tipped a mobile home off its foundation and tore its roof off in Waseca. Several businesses and homes in Waseca received structural damage. A commercial billboard broke loose, damaging four trucks. Trees and power lines were also downed.
Farchment Kalamazoo	29         1615EST         8         8         2         Hail (2.75)           29         1615EST         8         8         Funnel Cloud           29         1616EST         8         4         Thunderstora Wind           29         1628EST         8         2         Hail (1.75)	Douglas and Todd	10 2046- 15 10 0 0 0 Tornado (FO)
Vicksburg Fortage	29 1634EST 8 8 8 Hall (0.83) 29 1637EST 0 8 9 Funnel Cloud  Trees and power lines were down throughout the area.  Local flooding occurred in northeast Kalamazoo and  Parchaent.		A tornado touched down at several sites along a 15 mile path. The tornado was sighted 4 miles north of Osakis, 10 miles south of Eagl Bend and 3 miles west of Browerville. The tornado touched down in open areas and caused no significant damage.
Dake Michigan off South Haven	29 1721EST 8 8 8 Waterspout  The spout was soving southward parallel to the shore.	Ottertail Co. 3 N Fergus Falls New York Mills	10 2230CST
4 E Adrian to 6 NNW Blissfield, Lenawee Co.	31 153@EST 3.5 20 0 3 Tornado (FQ) Trees blown down along the track showed some twisting motion. A mobile home mear the end of the track was lifted off its foundation and damaged. The funnel was seen.		Winds knocked over a tree that crushed a mobile home and winds ripped a deck off another mobile home north of Fergus Falls. Twenty trees at the same site were twisted and downed. A number of trees were also knocked down around New York Mills.
		Cass Co.	10 233OCST 0 0 4 0 Thunderstorm Wind Winds downed trees and power lines in scattered areas across Cass County. The heaviest damage occurred near Norway Lake north of Pine River where several homes received roof and structural damage.
21 MINNESOTA		Crow Wing Co. Emily	10 2345CST 0 0 0 0 Thunderstorm Wind  A number of trees were knocked down around Emily.
10 E Crookston  Erskine  Mentor Red Lake Co.  Oklee Polk Co.	01 1535- Short 20 0 0 0 0 Tornado (F0) 1540CST 01 1544- 0.1- 20 0 0 0 0 Tornado (F0) 1559CST 0.3 01 1544CST 0 0 0 0 Funnel 01 1610CST 0 0 0 0 Funnel	Le Sueur Co. Le Sueur	11 0015CST 0 0 0 ? Thunderstorm Wind, Hail (0.75)  Dime size hail caused minor crop damage and winds downed several trees.
6 NW Fosston	0 0 0 0 Funnel  A tornado touched down briefly near Marcoux and another tornado was observed picking up debris from the ground just west of Erskine.	Steele Co. Owatonna	11 0030CST 0 0 3 0 Thunderstorm Wind downed six trees and caused minor property damage.
Polk Co. 3 S Gulley 8 NE Fosston Clearwater Co. 2 N Gonvick	01 2300CST 0 0 0 0 Hail (0.9) 01 2310CST 0 0 0 0 Funnel 01 2330CST 0 0 5 ? Thunderstorm Wind	Lincoln Co. Hendricks 2 S Porter Lyon Co. 1 N Taunton	11 0238CST
	Thunderstorm winds damaged several farm sites north of Gonvick. Locked down grain doors were blown off an elevator and a metal door was blown off a barn. Windows were knocked out of farm homes and trees were downed. The wind was accompanied by hail of unspecified size that damaged crops and accumulated to 6 inches in depth.	Lincoln Co. Tyler Renville Co. Sacred Heart Renville Kandiyohi Co. Willmar	Hail (1.0)     11 0350CST
Wright Co. 4 SE Cokato	05 1654CST 0 0 0 0 Funnel	5 NW Lake Lillian 7 NW Lake Lillian Nicollet Co. Lafayette	11
Olmsted Co. Rochester	05 1729CST 0 0 0 0 Thunderstorm Wind (56) A gust of 64 miles per hour was measured at the Rochester Airport.	Stearns Co. 3 S Kimball Wright Co. Buffalo	11 0530CST 0 0 4 0 Thunderstorm Wind 11 0545CST 0 0 4 0 Thunderstorm Wind
Dodge Co. 2 SE Claremont	06 105SCST 0 0 0 0 Funnel	Sherburne Co. Elk River Anoka Co. Coon Rapids	(76)  11 0555CST 0 0 4 0 Thunderstorm Wind  11 0600CST 0 0 0 0 Thunderstorm Wind
Washington Co.	06 143SCST 0 0 0 0 Funnels  Several funnels were sighted across the central Washington County	Blaine Anoka Isanti Co. Cambridge	11   0600CST
Olmsted Co.	communities of Woodbury, Lake Elmo and Lakeland.	Kanabec Co. Mora Pine Co. 2 W Pine City	11 071SCST 0 0 4 0 Thunderstorm Wind 11 0740CST 0 0 0 0 Thunderstorm Wind
Stewartville	08 2000CST 0 0 4 0 Thunderstorm Wind Thunderstorm winds damaged a metal shed and downed trees along a narrow path in Stewartville. Falling trees crushed a vehicle and caused minor property damage to homes.	2 E Sandstone	11 0807CST 0 0 0 0 Thunderstorm Wind Thunderstorms crossed from southwest to east-central Minnesota knocking down trees, causing crop damage and resulting in scattered reports of property damage. A man was treated at a hospital for cuts and bruises he received after a tree fell and crushed the cab of his truck near Big Kandiyohi Lake, northwest of Lake Lillian. A radio station at Buffalo measured a gust of 37 miles per hour.

	된 _ NO. OF ESTIMATED1	1	된 NO. OF ESTIMATED
	NO. OF ESTIMATED DAMAGE  PERSONS DAMAGE  CHARACTER  CHARACTER		NO. OF ESTIMATED DAMAGE  PERSONS DAMAGE  CHARACTER
PLACE	TIME - LOCAL STANDARD -	PLACE	TIME - LOCAL STANDARD LENGTH OF PATH (**INTER) CROP STANDARD CHRICES) WILLED CROP STANDARD CROP STAN
MINNES	ОТА	MINNES	DTA
Faribault Co. Elmore Blue Earth Martin Co. Fairmont Faribualt Co. Kiester Wells	11   1530CST	Beltrami Co. 4 E Bemidji Mahnomen Co. 4 E Naytahwaush Clearwater Co. 7 SW Bagley Bagley 1 NW Bagley	18 1545CST 0 0 3 0 Thunderstorm Winds 18 1711CST 0 0 0 0 Funnel 18 1727CST 0 0 0 0 Funnel 18 1741CST 0 0 0 0 Funnel 18 1754CST 0 0 0 0 Thunderstorm Winds
Freeborn Co. Alden Winona Co. 7.5 SE Winona	11 1647CST 0 0 4 0 Thunderstorm Wind, Funnel 11 1730CST 0 0 0 0 Funnel	5 S Shevlin	18 1807- Short 5 0 0 0 0 Tornado (F0) 1808CST A tornado touched down briefly south of Shevlin and picked up some brush and debris. Winds damaged a house and some trees east of
2.5 SE Rollingstone	11 1810- 0,1 5 0 0 0 0 Tornado (F0) 1811CST		Bemidji and blew down a shed northwest of Bagley.
Pipestone Co. and	Thunderstorm winds knocked down trees and caused scattered property damage across south-central and southeast Minnesota. A tornado touched down briefly in Hillsdale Township in Winona County. Lightning caused considerable damage to electronic equipment and appliances around Fairmont.  11 2030CST 0 0 0 5 Thunderstorm Wind	Becker Co. Lake Park Wilkin Co. Campbell Ottertail Co. Pelican Rapids Fergus Falls	20 0240CST 0 0 0 0 Hail (0.75) 20 0330CST 0 0 4 0 Thunderstorm Wind 20 0355CST 0 0 4 0 Thunderstorm Wind 20 0400CST 0 0 0 Thunderstorm Wind
Murray Co,	Strong winds accompanied by pea size hail damaged crops in a 7-mile path from just east of Holland, east into extreme western Murray County.	Ottertail Battle Lake Hubbard Co. Guthrie Wadena Co.	Column   C
Lincoln Co. Tyler Redwood Co.	11 2050CST 0 0 0 0 Hail (1.75)  Golfball size hail fell at Tyler.	Aldrich Todd Co. Staples 7 E Long Prairie Itasca Co.	20 0540CST 0 0 0 0 Hail (0.75) 20 0600CST 0 0 4 0 Lightning 20 0630CST 0 0 0 0 Thunderstorm Wine  Thunderstorms with damaging wind and marble size hail moved
Walnut Grove Milroy	11   2135CST   0 0 0 0 ? Hail (1.0)   11   2135CST   0 0 0 0 ? Hail (1.0)	Chisago Co. Harris	west to east across north-central Minnesota. A gust of 71 miles per hour was measured at a radio station near Fergus Falls.  20 0732- 0.1 5 0 0 0 Tornado (FO)
Sibley Co. Gaylord	11 2320CST 0 0 0 0 Thunderstorm Wind (52)		0735CST A tornado touched down just east of Harris near the intersection of County Roads 9 and 57. No significant damage occurred.
Olmsted Co.	Winds of 60 miles per hour were reported at Gaylord.	Wright Co. St. Michael Dakota Co. Burnsville	20 1745CST 0 0 0 0 Hail (1.0) 20 1745CST 0 0 0 0 Hail (1.75)
8 SW Stewartville	14 1630CST 0 0 0 0 5 Hail (1.5)  Hail damaged 2000 acres of crops in southwest Olmsted County.  The hail was as large as 1½ inch in diameter but was mostly pea to marble size and accumulated to a depth of 3 inches at some locations.	Burnsville Wright Co. Buffalo Dakota Co. Mendota Heights Ramsey Co. Shoreview	20 1810CST 0 0 0 0 Funnel 20 1810CST 0 0 0 0 Hail (0.75) 20 181SCST 0 0 0 0 Hail (1.75) 20 1910CST 0 0 3 0 Thunderstorm Wind
Waseca Co. Janesville Blue Earth Co.	14 1835- 0.1 5 0 0 0 0 Tornado (F0) 1836CST	Maplewood and North St. Paul Carver Co. 1 E Waconia	
Mankato 5 W Madison Lake	14 1837CST 0 0 0 0 Funnel 14 1930- 0.1 5 0 0 0 0 Tornado (F0) 1931CST  Tornadoes touched down briefly just north of Janesville and near Eagle Lake west of Madison Lake.		Hail (0.75)  A large and distinct funnel moved over Burnsville south of Highway 42. The funnel was observed by many as it moved in a northeast direction. Thunderstorm winds knocked down trees in Shoreview. Several small planes and a hangar were damaged by wind at the Molnau Airport near Waconia.
Polk Co.	16 2200CST 0 0 ? 6 Hail (2.75) Hail as large as baseballs damaged crops from East Grand Forks through the Key West area to Euclid. County officials estimated that 20,000 acres were affected with damage up to 100 percent in areas.	Hennepin Co. Eden Prairie Bloomington Scott Co. Shakopee Prior Lake Savage	
Koochiching Co. 34 W International Falls	17 0230CST 0 0 0 0 Thunderstorm Wind Winds knocked down trees south of Birchdale and west of Loman.	Eastern Carver Co.	20 1930CST 0 0 5 0 Flash Flood  Intense rain fell at a rate of 7.83 inches in 6 hours at Chaska from the evening into early morning hours. 6.75 inches fell in the southern sections of Bloomington and 6.52 inches fell in Burnsville. The greatest rainfall recorded was 9 inches at
Becker Co. Detroit Lakes  Itasca Co.	17 1845CST 0 0 3 0 Thunderstorm Wind Winds knocked down trees and power lines.		Shakopee. At 1930CST, a mudslide occurred on Highway 169 along the border of Eden Prairie and Chanhassen. By 1945CST, flooding filler some streets with one foot of water in Chaska and by 2040CST, basements were also flooded and roads had to be closed. Creeks ran out of their banks in eastern Carver County and washouts occurred around bridges and on the shoulders of roads. The foundation was washed out under a mobile home in Chaska causing
Deer River	18 1400- 0.1 10 0 0 3 0 Tornado (FI) 1405CST A tornado moving northeast over Deer River touched down briefly breaking off trees and signs. The tornado picked up a gas pump anchored in concrete and smashed it into a shed. The tornado funnel was observed to be horizontal to the ground near the damaged area.	Kandiyohi Co. Raymond	unrepairable damage.  20 2055CST 0 0 0 0 Hail (1.0)

<u>.                                    </u>		CAL	РАТН	E		OF SONS	ESTIMA DAM					(AE	PATH	E		. OF	ESTIM. DAM	ATED†	
PLACE	DATE	TIME - LOCAL STANDARD	LENGTH OF P	WIDTH OF PATH (YARDS)	KILLED	INJURED	PROPERTY	CROPS	CHARACTER OF STORM	PLACE	DATE	TIME - LOCAL STANDARD	LENGTH OF P.	WIDTH OF PATH (YARDS)	KILLED	INJURED	PROPERTY	CROPS	CHARACTER OF STORM
MINNES	DTA		<u> </u>	l	J	LL			<u> </u>	MINNES	OTA	<u></u>	<u> </u>	J	—	L	L	<u> </u>	L
Hennepin Co. Mound Excelsior		2119CST 2120CST			0	0	0 0		Hail (0.75) Thunderstorm Wind	Hennepin Co. Champlin Maple Grove and Brooklyn Park	23 23	1735CST 1747- 1802CST	5	170	0	0	0 7		Funnel Tornado (F3)
Rock Co. Luverne Clay Co.	20	knocked 2235CST s gusted			0	0	0 auvern		Thunderstorm Wind (51)		Elm into of 9 torn when dama Mapl and	Creek Par Brooklyn 7th and Made was re e 14 home ged to so e Grove a cause ma	k Reset Park : West Rivies the Sear the	rve in and dis ver Roa e begin left uree. D The to age to	Maple sipated. The ming minhal amage rnado ten he	Groved jumple group of it bitab tota went	e. The st price eatest s path le. A led 5 s on to in Bros	e torns or to to intens in Mag total sillion destre	east edge of the ado moved east the intersection sity of the pole Grove of 298 homes were in dollars in by four barns Park. Eight eal damage.
Glyndon Hitterdal  Moorhead Barnesville Clearwater Co. Shevlin	21 21 21	1826CST 1845- 1846CST 1900CST 1913CST	Short	5	0 0 0 0	0 0 0 0	0 0 3 0		Funnel Tornado (F0) Thunderstorm Wind Funnel Thunderstorm Wind	Hennepin, Ramsey, Dakota, Scott, Carver and Washing- ton Counties		1800- 0100CS		noises		2	7		Flash Flood
Polk Co. Lengby St. Louis Co. 20 W Ely Hubbard Co. 20 S Bemidji Itasca Co. 20 NW Grand Rapids Norman Co. Shelly	21 21 21 21 21 21 21 21 21 21	1930CST 2030CST 2046CST 2230CST 2235CST 2302CST			0 0 0 0 0 0 0	0 0 0	0 0 0 0 0 0	0 0 0 0 0 0	Hail (0.75)  Thunderstorm Wind  Funnel  Hail (0.75)  Hail (0.75)		Citi 2000 syst 2006 of r than in a 2-ho	es metrop CST, mudsi ems start CST, 6 inc ain fell 6.5 hour 24-hour ur rainfa	oolitan ides, ed to ches of at the s that period. ll reco	area a flooded spread rain h Twin C evenin 5.26 ord at	round base through ad fa ities g, bround inches the ai	1800 ments gh th llen Inte aking es fei	CST. In and on the metro in Minn rnation gared in 2 to 2 t	Between verload polition in the contract of th	nto the Twin n 1900CST and ded drainage area. By n. Ten inches rport in less or the most rain which set a new the southern sceived heavy
AGA BOTUP Cass Co. Cass Lake	22 A to stir seve lift	0024CST  0210CST  rnado tou red up a ral locat	debris ions in of of a	cloud. north	0 0 efly j Thur ern Mi and bl	0 0 just so indersto innesol	0 outh oorms k	0 f Hit nocke	Thunderstorm Wind, Hail (0.75)  Thunderstorm Wind terdal and d down trees at also partially several other		rain in s beca the Seve foun and area grea	on July ome areas me lakes area. St ral flat dation fa Purgatory s. Nine ter flood	20th, gi . Stre and the orm sev roofs of ilures creeks Mile Co ing the	iving a eets be- ousands wers sp- collaps- were r s swell- reek wa- an estim	cumul came i of mo outed ed on eporte ed and s the mated	lative rushing toris like build ed. ! d ove: most for a	e total ng rive sts wer geyser dings a Minneha rflowed severe a 100-)	of 12 ers, pa e stra s duri ind man tha, Ni l, inund ly imp	to 14 inches riking lots unded throughout ing the storm. In the storm, to be seement in the Mile, Bassett, lating adjacent acted, having muckent in some covered with
Koochiching Co. 5 E International Falls Norman Co. Ada	22	1945CST			0	0	0 sout		Thunderstorm Wind re of Rainy Lake.  Thunderstorm Wind (71)		9 fe Thur esti resi doll faci with wind Minn Anot	et of flo sday nigh mated 21. dential a ars damag lities, w severe cows. A m eapolis a her man co	od water t until 3 milli nd 264 te to pu as repo tuts aft an was ts water lied aft	er and : I the form dol commerciablic p rted. T ter pre killed r press ter he	remain ollowing lars of cial propertion wo sissure in the ure of drove	ned cling Tudamage property, me sters from he Silaved : arout	losed a  uesday e occur rties. ostly v in Edir rising bley Pa in his nd a po	aftern red to Five vastewa a were water water baseme	ler water from 1000. An 10 8,643 to six million 12 the reatment 13 the reatment 14 the reatment 15 the reatment 16 the reatment 17 the reatment 18 the reatment 18 the reatment 18 the reatment 19 the reatment 10 the reatmen
Polk Co. 91W Fosston Mahnomen Co. Mahnomen and Waubun Clearwater Co. Bagley Beltrami Co. 16 N Bemidji Bemidji Biack Duck	23 23 23 23 23 23 23 23	0255CST 0310CST 0315CST 0320CST 0330CST 0345CST	•		0 0 0 0	0 0 0 0 0 0 0	4 0 3 3 0 3	0 0 0 0 0 0 0	Thunderstorm Wind Thunderstorm Wind Thunderstorm Wind Thunderstorm Wind Thunderstorm Wind Thunderstorm Wind	Anoka Co. Fridley Hennepin Co. Long Lake Golden Valley Ramsey Co. St. Paul Hennepin Co.	23 23 23 23	1813CST 1823CST 1823CST 1835CST	(M78I	Р, М27V	0 0 0	0 0 0	0 3 0 0	0 0	Funnel Thunderstorm Wind Funnel Funnel
Roochiching Co. Northome	Gust dest wate Buil	0350CST is of 82 is troyed far er tower.	nm outb A mob re also Duck.	uilding ile hom destro Numero	tore s, up e was	rooted tippe 6 mile	trees d over	s and r west th of	Thunderstorm Wind al homes in Ada, damaged the Ada of Fosston. Bemidji, in Bagley down resulting in	Long Lake Eden Prairie Eden Prairie Golden Valley St. Louis Park Scott Co. Shakopee Hennepin Co. Brooklyn Park Golden Valley	23 23 23 23 23 23 23 23 23 23 23 23	1840CST 1844CST 1851CST 1902CST 1916CST 2023CST 2023CST 2023CST 2023CST			0 0 0 0 0 0 0	0 0 0	0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0	Hail (0.8) Funnel Funnel Thunderstorm Wind (61) Funnel Funnel Funnel Funnel Funnel
Stearns Co. St. Cloud	23	1121CST			0	0	0	0	Hail (1.0)	Anoka Co. Blaine Blaine Lino Lakes	23 23 23	2237CST 2247CST 2250CST			0	0 0	0 0	0	Hail (1.75) Thunderstorm Wind Thunderstorm Wind
Benton Co. Sauk Rapids	Larg	1130CST ge trees a Gauk Rapid		er line	0 s wer	0 e knoc	0 ked do	o own by	Thunderstorm Wind strong winds		Thun Gust Wind	derstorm s to 70 m s also kn s in Blai	iles pe ocked o ne alor	er hour down tr ng High	cracl ees 4 way 6	ked w: feet 5. Te	indows in dia ennisba	in Go: meter 11 si:	Hail (2.5)  ation in Long Lake den Valley.  and downed power te hail fell in erstorm winds.
Sherburne Co. Zimmerman	23	1705CST			0	0	0	0	Hail (0.75)	Olmsted Co. 6 S Rochester	23	2252CST				0	0	0	Thunderstorm Wind (55)
				,						Renville Co. Olivia	23	2305CST			0	. 0	0	0	Hail (2.75)

			JULY 19
PLACE	TIME - LOCAL STANDARD CROPS RILLED WIDTH OF PATH (YARDS) CROPS RILLED CROPS CR	PLACE	TTME - LOCAL STANDARD -
	TIME - LOC STANDARD LENGTH OF PAI WILLES) WILLES WILLES WILLES WILLES WILLES WILLES WILLES WILLES CROPS CROPS CROPS		TIME - LOCAL STANDARD CENGTH OF PATH (YARDS) KILLED DE CROPS
MINNES	ОТА	MINNES	DTA
Lake Co.	24 0300CST 2 0 0 0 Lightning A father and son were killed by lightning which hit a white	Rice Co. Northfield	27 1545CST 0 0 4 0 Thunderstorm Win (56)
	pine 20 feet from the tent they were camping in. Two others at the same site on an island in Ensin Lake in the Boundary Waters Canoe Area received minor burns. (M430, M130)	Dakota Co. 5 S Lakeville Scott Co.	27 1620CST 0 0 4 0 Thunderstorm Win-
Chisago Co.		New Prague Waseca Co. Waseca	27
Stacy.	25 1940CST 1 1 0 0 Lightning	Waseca	(70) 27 1743CST 0 0 4 0 Thunderstorm Win-
	One woman was killed and another woman was knocked unconscious and hospitalized after being struck by lightning while horseback riding. A horse was also killed where the lightning struck 1/2 mile east of Stacy. (F390)	6 W Waseca Scott Co. 16 E Gaylord	(63) 27 1750CST 0 0 4 0 Thunderstorm Win 27 1814CST 0 0 3 0 Thunderstorm Win
Stearns Co.	25 2100CST 0 0 4 0 Thunderstorm Wi	Freeborn Co. 15 NW Albert Lea	27 1845CST 0 0 0 0 Funnel
2 E Belgrade Kandiyohi Co. Atwater Meeker Co. Dassel Anoka Co. Coon Rapids	25 2100CST 0 0 4 0 Thunderstorm Will 25 2200CST 0 0 0 4 0 Thunderstorm Will 25 2225CST 0 0 0 4 0 Lightning 25 2237CST 0 0 0 0 Thunderstorm Will Winds tore the roof off a residence near Belgrade. Twenty trees were uprooted or broken off at a farm site near Atwater. A warehouse was destroyed at Atwater and its debris scattered for four blocks. Lightning shattered the chimney of a home in Dasse and damaged the interior.	d d	A gust of 64 miles per hour was measured in Northfield where a number of trees were knocked down and a construction trailer was flipped on its side. Winds caused scattered tree damage and knocked out power and phone lines at many locations. One barn wa destroyed in Eureka Township of Dakota County south of Lakeville and another barn was damaged between Waseca and Janesville. The city of Waseca was hit by a gust of 81 miles per hour, and then another gust of 72 miles per hour 16 minutes later. Windows were blown out in Blakey Township in extreme southwest Scott County.
Wabasha Co.		Kittson Co. · 5 SE Lake Bronson	31 1630CST 0 0 0 0 Funnel
Lake City	26 0210CST 0 0 0 ? 0 Thunderstorm Wi Thunderstorm winds damaged the Lake City Marina and downed trees in and around Lake City.	d	
Wright Co. Silver Creek Buffalo Montrose	26 0800CST		04 0800CST 0 0 4 0 Thunderstorm Win Strong winds damaged several roofs in Cleveland. Also, an awning
Goodhue and Rice Counties	50 feet into a neighboring yard just southeast of Buffalo.  27 1420- 30 220 0 0 6 6 Tornado (F3) 1610CST	Leake County, 5 SE Carthage	was blown off a firehouse.  06 1725CST 0 0 5 0 Thunderstorm Win  Numerous trees and power lines were blown down in the Freeny community, 5 miles southeast of Carthage. Also, some homes had
	An unusual southwest-moving tornado initially touched down eight miles northwest of Red Wing. The tornado damaged a farm site east of Highway 61 then reached its maximum intensity as it	Sharkey County, 4 N Rolling Fork	roof damage and tin was blown off a storage shed.  08 1310CST 0 0 0 0 Funnel Cloud
	moved across Welch Township. Two farm sites in Welsh Township were leveled. The tornado left debris from buildings and farm equipment scattered over hundreds of yards. Trees were lifted and tossed like toys and electric poles were snapped like twigs.	Jackson County, Hurley	14 1403CST 1 0 0 0 Lightning A 34-year-old man was working on his car under a 60 foot pine tree
	Dirt and debris within the tornado reached 3/8 of a mile across at its peak intensity. A horse was picked up by the tornado along with debris and was observed sailing horizontally through the air. Pickup trucks were also lifted and thrown about.	Hinds County,	Lightning struck the tree, then the man, instantly killing him. To lightning strike occurred just before it began to rain. M340  24- Afternoon 0 5 0 0 Heat
	Several hundred farm animals were injured or killed and wildlife also perished. The tornado skipped across northwest Goodhue County staying south of the Cannon River. Property damage was heavy in Stanton Township Then at 1535CST, the tornado was sighter		28 Five persons suffered heat exhaustion from temperatures near 100 degrees in the Jackson area. All five required aid by paramedics
	five miles east-northeast of Northfield where farm buildings were destroyed and a 150 foot swath of corn was sliced down. The tornado passed two miles south of Northfield then to the southeas of Dundas. The tornado ended in Bridgewater Township of Rice County where trees and power lines were downed about eight miles north of Faribault. The tornado left widespread power and	Harrison County,	24 1730CST 0 2 0 0 Lightning Two boys were standing under a tree during a thunderstorm. Light ning struck the tree and then both of the boys. When paramedics arrived at the scene, neither boy was breathing and one boy's hear
	communication outages and extensive crop damage. In Goodhue County alone, 5,000 acres of crops were damaged, 25 homes received minor damage, and six farm sites received major damage in addition to the two farms that were totally destroyed.		had stopped.   Both boys survived.
Dakota Co.			Winds near 60 mph were observed in southern Jones County. Trees and antennas were blown down.
Miesville Randolph	27	Marion County, 7 E Bunker Hill	25 1530CST 0 0 ? ? Thunderstorm Wind Several Christmas trees were blown down in extreme northeast Marion County, 7 mfles east of Bunker Hill.
	moved southwest reaching Miesville at 1515CST. The tornado lifted after it uprooted trees, blew out windows, and moved a hous off its foundation in Miesville. Damaging winds picked up where the tornado left off. Many trees were knocked down around	e Adams County, Natchez	25 1607CST 0 0 ? ? Hail (.75)
	Randolph and Lake Byllesby Reservoir. Twelve residences near Lake Byllesby Reservoir received wind damage. The strong winds pushed past the Randolph area into Sciota Township where a machine shed and a barn were destroyed.	Jackson County	$26-1300{\rm CST}$ $0-0-?$ ? Thunderstorm Wind Strong winds blew down signs and uprooted trees through parts of the county.
	1	Harrison County, Gulfport	$26-1330{\rm CST}$ $0-0-?$ ? Thunderstorm Wine Strong winds blew down trees in the Drange Grove area of northern Gulfport.
			<u> </u>

TIT.Y 1987

		CAL	РАТН	Ŧ		. OF	ESTIMA DAM					CAL	РАТН	Ę		OF SONS	ESTIM. DAM		
PLACE	DATE	TIME - LOCAL STANDARD	LENGTH OF F	WIDTH OF PAT (YARDS)	KILLED	INJURED	PROPERTY	CROPS	CHARACTER OF STORM	PLACE	DATE	TIME - LOCAL STANDARD	LENGTH OF F	WIDTH OF PATH (YARDS)	KILLED	INJURED	PROPERTY	CR0P\$	CHARACTER OF STORM
MISSISSI	PPI	I							1	MISSOUF	1— RI		-	J				<u> </u>	
Hinds County, Jackson	26	1430CST			0	0	5		Thunderstorm Winds, Hail (1.75)	Taney County		1000CST	ttered	power :	0 lines	0 were	4 downed		TSTM Wind
	lines		ged ho	mes in s	south	Jacks			large trees and power p to the size of golf	Christian County	1	1030CST dings, tr	ees, an	nd powe	0 r line	0 es wer	4 re dowr		TSTM Wind
Hinds County, Byram Pike County.		1440CST			0	0	?		Hail (1.75)	Howell County	Thun					0 feed	5 I-milli		TSTM Wind
3 W McComb	Trees	1730CST and powe Comb.	r line:	s were t	0 blown	0 down	? on Hig		Thunderstorm Winds 24, 3 miles west	Cedar County, Stockton Lake		s, powerl	ines, a	and tre	es. O	0	4	0	TSTM Wind
Meadville	ļ	1735CST	were	blown de	O own i	0 n Meac	? dville.		Thunderstorm Winds	State Park  Dade County:	down		lers,	and tre	es we	re dan	naged a	and po	wer lines were
Jackson County, Gautier	27 Light		ckah	ome in (	0 Gauti	0 er and	4 d start	ted a	Lightning fire. The roof	Lockwood 1E Dadeville		0800-081 0820CST s were es	timated					0 kwood	TSTM Wind TSTM Wind and a roof was
Rankin County, Richland		ived exten	sive d	amage, w	ith d	amage O	estima 5	0	t \$10,000. Thunderstorm Winds, Hail (1.00)	Polk County, Bolivar	1	0837CST s of 50 t	o 60 mp	ор осси	0 rred.	0	0	0	TSTM Wind
									eastern Richland. in the same area.	Greene County: Walnut Grove Fair Grove	05 05	0845CST 0850CST			0	0	4	0 <b>0</b>	TSTM Wind TSTM Wind
Northeast Amite County, Smithdale		1500CST s were blo	own do	wn near	0 Smith	0 hdale.	?	3	Thunderstorm Winds	Laclede, Polk,		s and pown into a 0900-						Grove.	e and a tree was
Adams County, 8 NE Natchez		1547CST s were blo	own dos	wn on th	0 ne Nat	0 tchez	? Trace.		Thunderstorm Winds	Dallas, Webster, and Wright Counties		1000CST	catter	ed dama	-	-	-		nd power lines.
Walthall County, Lexie		1310CST e glass w	indows	were bl	0 Iown o	0 out an	4 d tree		Thunderstorm Winds wn down in Lexie.	Webster County, Elkland	1	0915CST s of up t	o 60 m	ph occu	0 rred.	0	0	0	TSTM Wind
Rankin County, 5 E Florence Hinds County	30 30	1440CST 1700CST			0	0	?		Hail (1.75) Thunderstorm Winds	Hickory County, Hermitage	Two							re pus	TSTM Wind hed up on Rocks ed and trees were
10 W Jackson Southwestern Copiah	Tree	s were blo	own dos	wn betwe	en Ra	•		Clinto		Morgan County, Barnett	05	oted. 0915CST			0	0	3	0	TSTM Wind
County  Claiborne County, 5 ENE Port Gibson	l	s were blo 1815CST	own dov	vn in so	outhwe	estern O		ıh Cou		Pettis County, Sedalia	05	e tree li 0915CST ility poJ			0	0	2	0	TSTM Wind
	Port	Gibson.	own dow	wn on Hi					t-northeast of	Laclede County, Lebanon	05	0922CST s of 55 t			0	0 at Leb	0 anon A		TSTM Wind
Leake County, Singleton								and s	Thunderstorm Winds igns through a two lso blown out.	Howell and Texas Counties	05	1000- 1100CST			0	0	5	0	TSTM Wind
												spread, s hern Howe						ower	lines occurred in
										Miller County, Eldon	1	1010CST e trees w	ere do	med.	0	0	3	0	TSTM Wind
23 MISSOURI  Newton County,	Loz	0810CST			0	0	3	0	TSTM Wind	Cooper County, Booneville		1020CST damaged	a home	and tr	0 ees ju	0 ust we	4 est of		TSTM Wind ville.
7E Seneca	Wind	ls of 65 t	o 70 m	ph cause	-	_	-		1	Cole County, Jefferson City	Atr	1020CST ailer was heast por					4 trees		TSTM Wind downed in the
Barry County, Monett; and Lawrence County, Aurora	1	0900CST er lines a	nd tre	es were	-	-	7	v	AND MAIN	Pulaski County, Waynesville	05	1020CST			0	0	4 ned nea		TSTM Wind
Barry County, Cassville	04 Comm	0905CST mercial an	tennas	were do	0 owned	. 0	3	0	TSTM Wind	Boone County: Columbia Sturgeon	05	1045CST 1051CST			0	0	3	0	TSTM Wind
Lawrence County, Aurora	1	0926CST is of up t	o 60 m	ph occu	0 rred	0 at Aus	O rora.	0	TSTM Wind		Tree					-	_		and large trees
Greene County, Republic	1	0929CST L of up to	3/4 i	nch diam	0 meter	0 fell	0	0	Hail (0.75)	Howell County, Mountain View		1100CST s of 50 t	o 60 m;	ph occu	0 rred.	0	0	0	TSTM Wind
Stone County, Crane		0930CST es were up ne to near				0 ile pa	4 ath fro	0 om 3 n	TSTM Wind miles north of	Crawford County, 5N Cuba	1	1100CST s were do	wned 5	miles	0 north	0 of Cu	3 ıba.	0	TSTM Wind

	н	Ŧ		. OF	ESTI	MATEDI			Τ	12	I	1	NO.	OF	ESTIM	ATED!	
	80	HTA TA		SONS		MAGE	CHARACTER			OCA)	PATH	¥ G	PER		DAM		CHARACTER
PLACE	DATE TIME - LOCAL STANDARD	LENGTH OF PAT (MILES) WIDTH OF PATH (YARDS)	KILLED	INJURED	PROPERTY	CROPS	· OF STORM	PLACE	DATE	TIME - LOCAL STANDARD	LENGTH OF (MILES)	WIDTH OF PATH (YARDS)	KILLED	INJURED	PROPERTY	CROPS	OF STORM
MISSOUI	RI							MISSOU	RI								-
Phelps County,	05 1105CST		0	o	4	0	TSTM Wind,	St. Louis City	06	1550CST			0	0	3	0	TSTM Wind
Rolla	Trees were dow	med by winds	s of up	ta 65	5 moh		Hail (0.50) /2 inch diameter		Wind	damaged	trees i	n the s	outhe	rn pe	art of	the c	ty,
	hail fell at E							St. Louis County,	06	1617CST			0	0	?	?	Hail (2.00)
Franklin County: Gerald, New Haven,	05 1105CST		0	0	5	0	TSTM Wind	Afton									
and Union Gerald and New	05 1110-		0	0	4	-	TSTM Wind	Warren County: Warrenton	06	1620CST			0	0	2	?	Hail (1.75)
Haven	1125CST		·	•				Warrenton and Truesdale	06	1625CST			0	0	?	?	Hail (1.75)
	A rapidly-movi	er lines acro	oss mucl	h of t	the c	duced wo	rind damage to Damage was	St. Charles County,	06	1840CST			0	0	0	0	Hail (0.75)
	reported at Ge Additional dam					rees an	d downed power	Cottleville									
	lines occurred	at Gerald a	and New	Haver	n beti	ween 11	10CST and 1125CST.	St. Charles County, St. Peters	1	2120CST			0	0	4		Flash Flooding
Dent County, Salem	05 1110CST		0	0	3		TSTM Wind		Floo	ding of I	ardenne	Creek	force	d the	closu	re of	Interstate 70.
	Large tree lin		ied in i	the no	orthei	rn port	ion of the	Hickory County, Hermitage	12	2010CST			0	0	?	?	Hail (0.75), TSTM Wind
Gasconade and	05 1120CST		0	0	4	0	TSTM Wind	nermreage				ch diar	neter	and t	winds o	of up	o 60 mph occurre
Montgomery Counties, Hermann and North	Trees and powe						orthern Gasconade		at l	lermitage							
of Hermann	double) and not	CII OZ MOZIMA	11. 0.				,	Linn County	15	1900- 1914CST			0	0	?	?	Hail (1.75)
Warren County, Marthesville	05 1130CST Wind damage oc	coursed in Ma	0	0 111e a	3 and Dr	-	TSTM Wind			of from			3/4 i	nch d	diamete	r fel	in the southeas
	_	.cuttou in in	-						1			·		۰	•		many tir.
Howell County, 3S Mountain View	05 1140CST Winds of 50 to	o 60 mph occi	0 erred.	0	0	0	TSTM Wind	Morgan County, Versailles	1	1430CST is of up t	:o 60 mp	h occus	0 rred a	0 t Vei	0 rsaille		TSTM Wind
St. Janda County	05 1144CST			0	0	0	TSTM Wind	Barton County,	25	night			1	n	0	n	Lightning
St. Louis County, Spirit of St. Louis Airport	Winds of up to	53 mph occi	rred.	U	U	U	ISIN WIRC	Liberal	A 16	-year-old		as kill					
									Prai	ie State	Park.						
Jefferson County: countywide High Ridge	05 1230CST 05 1235CST		0	0	3		TSTM Wind TSTM Wind										
nigh ktuge	Trees were blo			ige an	d oth	ner sca	ttered locations										
	within the cou Ridge.	nty. Winds	of up t	to 60	mph w	vere re	ported in High										
St. Charles County,	05 1233CST		0	0	3	0	TSTM Wind	24 MONTANA									
10E Washington	Large tree lim	ibs were down	ed.					Meagher County	02	1800MST			0	0	0	4	Hail (1.00)
St. Louis City	06 1000-		0	0	3	0	Hail (1.00)		One-:		eter ha	il fell	at Fo	rt L	ogan, d	causin	g some crop
	1015CST Hail of up to	l inch in di	ameter	fel1	in se	everal	locations within			-			0	0	0	4	Flash Flood
	the city, Som							Meagher County	Flasi				Mhite	Sulp	hur Spi	rings	and Martinsdale.
St. Louis County: Jefferson Barracks	06 1005CST		0	0	0	0	Hail (1.75)	,	Rain	s of 2.5	to 4 inc	ches fe	llin	a fe	w hours	5.	
Afton and Sapping- ton area			0	0	.4	0	Hail (1.75)	Stillwater County	!	1700MST	hail fo	.11 20 •	0	0	0 of Par	4 ~1i^	Hail (1.75) Some crop
Webster Groves Ellisville	06 1010CST 06 1010CST		0 0	0	0		Hail (0.75) Hail (1.00)			ge occurr			mres	west	OI Nag	ÆLJG.	Sale crop
	damage in the	area around	Afton a	and Sa	pping	gton in	diameter produced south and south-	Beaverhead County	15	1700MST			0	0	0	0	Thunderstorm Win
	west portions inch diameter	of the count fell at Jeff	y. Add erson E	dition Barrac	ally, ks, t	, hail up to 3	of up to 1 3/4 /4 inch diameter	,		y mph win Jerstorms		cred at	Dillo	n an	d Dewey	from	high-based
	hail fell at W Clarkson and M						r hail fell at	Roosevelt County	15	2145MST			0	0	0	0	Thunderstorm Wir
Franklin County	06 1015CST		0	0	0	0	Hail (0.75)	100000000	Thur	derstorm :			80 mp	h oc	curred	at Wo	lf Point. Minor
	Hail of 1/2 to	3/4 inch di	ameter	fell.						damage w	as repo	tea.					
Pike County:							/	Flathead and Lake Counties		1200MST- 1000MST			0	0	0	5	Heavy Rain
Bowling Green Bowling Green	06 1350CST 06 1420CST		0	0	?	?	Hail (1.75) Hail (1.75)			y rains o ry crop a				the	weeker	nd rui	ned the remaining
	Hail of up to	1 3/4 inch d	iameter	r fell	twic	ce in B	owling Green.	Classian Country		2300MST-	,		0	0	5	0	Flooding
St. Louis County, Chesterfield	06 1515CST		0	o	0	0	Hail (1.00)	Glacier County	22	TZM0080							-
St. Louis County;	06 1518CST		0	0	4	0 '	ISTM Wind			y rains o de Creek.	: 4 to (	ınche	s caus	ed e	xtensiv	e flo	oding along
Lambert Field, Florissant,	Winds of up to	62 mph occu	rred at	Lamb	ert F	ield.	Winds exceeding	Valley County	22	1455MST			0	0	0	o	Hail (0.75)
Hazelwood, Bridgeton,	60 mph were re Damage, mostly	ported in Fl to trees an	orissan d power	t by i	meteo s, wa	rologi: s repo:	st Guy Tucker. rted over much	,	Three	-quarter	inch d	iameter	hail	fell	near (	Glasgo	٧.
and St. Ann	of the area ar							Western Powder River	22	1615MST			0	0	0	0	Hail (1.00)
	present.							County	Hail	fell for	twenty	minutes	near	Fort	t Howe.		
St. Charles County, City of	06 1532CST Hail of up to	one-inch dia	0 meter p	0 roduc	3 ed so		Hail (1.00) or roof damage.	Cascade County	ſ	2040MST			C	0	0		Hail (1.00)
St. Charles and various locations	ap co		P		. 50				A few	one-inch	hailst	ones fe	ell in	sout	heast	Great	Falls.

лп.у 1987

PLACE	TIME - LOCAL STANDARD LENGTH OF PATH (MILES) WIDTH OF PATH (VARDS) WIDTH OF PATH (VARDS) CHARACTER OF STANDARD	PLACE	TIME - LOCAL STANDARD LENGTH OF PATH WIDTH OF PATH (YARDS) CROPS RILLED RILLED RILLED CROPS CROP
MONTAN	IA	NEBRAS	KA -
Toole County	25 1820MST 0 0 0 0 Hail (0.75) Three-quarter inch diameter hail fell 8 miles east of Sumburst.	Madison Co. 6S Norfolk	06 2235CST 0 0 2 3 Hail (1.00)  One-inch hail fell 6 miles south of Norfolk, damaging crops.
Liberty County	25 1900MST 0 0 0 0 Hail (1.75) Hail of 1.75 inch diameter fell in southern Liberty County.	Wayne Go. Wayne	06 2302CST 0 0 3 2 Thunderstorm Wind (52)
Teton County	26 1500MST 0 0 0 0 Hail (1.00)		Wind gusted to 60 m.p.h. at Wayne, resulting in reports of minor property damage.
Teton County	One-inch diameter hail caused some crop damage.  26 2015MST 0 0 0 0 Thunderstorm Wind strong thunderstorm winds occurred five miles west of Choteau.	Dixon Co. Newcastle	06 2318CST 0 0 4 2 Thunderstorm Wind (72) Wind gusted to 83 m.p.h. near Newcastle, damaging outbuildings
Northern Cascade and Teton Counties	29 1600MST 0 0 0 0 Flooding Heavy rains caused localized flooding of roads.	Keith Co. Paxton	and trees.  06 2337CST 0 0 2 2 Hail (0.75)
Roosevelt, Daniels, Sheridan, and Eastern Valley Counties	29- 2200MST- 0 0 6 6 Flooding 30 1000MST Heavy rains from thunderstorms caused extensive flooding. Roads, railroads, and crops were washed out.	Valley Co. 14W to 10WNW Ord	Three-quarter inch hail fell in Paxton and caused only minor damage  06 2340CST 4.0 50 0 0 5 4 Tornado (F2)  A tornado touched down 14 miles west of Ord and moved northeast about 4 miles destroying a barn and damaging trees, crops, and utility lines.
		Harlan Co. Oxford	07 0300CST 0 0 4 0 Thunderstorm Wind Strong winds took part of the roof off a house in Oxford.
		Lincon Co. Hershey	07 2200CST 0 0 2 2 Thunderstorm Wind (52)
25 NEBRASKA Sherman Co.	0 0 4 4 Hail (1.00),	Jefferson Co. 4SW Diller	Winds gusted to 60 m.p.h in Hershey during a thunderstorm.  08 0300CST 0 0 5 3 Thunderstorm Wind  Strong winds destroyed a shed, pump house, machine shed, and grain
Loup City	Thunderstorm Wind		bins on a farm 4 miles southwest of Diller.
	One inch hall and strong winds damaged trees and gardens in Loup City. Heavy crop damaged occurred just north of town.	Gage Co. 2E Beatrice	08 0330CST 0 0 3 1 Thunderstorm Wind Wind gusts blew down trees 2 miles east of Beatrice.
Valley Co. 8W North Loup	03 1715CST 0 0 2 5 Hail (1.75)  One and three-quarter inch hail did extensive crop damage 8 miles west of North Loup.	Buffalo Co. Gibbon and Kearney	08 2032CST 0 0 4 5 Thunderstorm Wind, Hail (1.75)
Dawes Co. Chadron	03 1730CST 0 0 2 0 Thunderstorm Wind (50)	Kearney Co. 2S Minden	Wind gusts tore the roof off a mobile home in Gibbon. One and three-quarter inch hail fell just south of Kearney, damaging crops.  OR 2040CST 0 0 3 1 Thunderstorm Wind
Perkins Co. 5SW Ogallala	Wind gusted to 58 m.p.h. at Chadron, causing minor damage.  03 1945CST 0 0 2 1 Thunderstorm Wind (61)	Cheyenne Co.	Grain bins were blown over by strong winds 2 miles south of Minden.  OB 2257CST 0 0 3 5 Hail (2.00)
	Wind gusts to 70 m.p.h. were reported by the public 5 miles southwest of Ogallala. No significant damage was reported.	7NW Sidney	Two-inch hail damaged crops 7 miles northwest of Sidney.
Lincoln Co. 5W North Platte	03 2055CST 0 0 0 0 Funnel Cloud  A funnel cloud was reported by the State Patrol 5 miles west of North Platte.	Douglas Co. Valley	09 0025CST 0 0 3 3 Hail (1.75)  One and three-quarter inch hail fell briefly around Valley, damaging a few roofs and crops.
Red Willow Co. Indianola	03 2200CST 0 0 4 2 Thunderstorm Wind Strong Wind gusts blew windows out of a home and took down trees in Indianola.	Butler Co. 2NE David City	09 0050CST 0 0 4 1 Thunderstorm Wind Strong winds uprooted trees and downed power lines 2 miles northeast of David City.
Dodge Co. Synder	05 1700CST 0 0 4 5 Flash Flood  Five to eight inches of rain fell in a 2 mile band between Dodge and Synder, damaging crops and eroding soil. Small wind-	Fillmore Co. 3E Fairmont	09 0140CST 0 0 3 5 Hail (1.75)  One and three-quarter inch hail damaged crops 3 miles east of Fairmont. Other crop damage was reported in the county.
Kimball Co. Kimball	driven hail with the storm also damaged crops.  05 1903CST 0 0 3 4 Hail (1.00)  One-inch hail damaged crops around Kimball.	Gage Co. Beatrice	09 1400CST 0 0 3 1 Thunderstorm Wind (59) Winds gusted to 69 m.p.h. at the Beatrice airport. Damage to
Douglas Co. Omaha	05 2045CST 0 0 5 1 Thunderstorm Wind Strong wind gusts blew down trees and power lines in the north part of Omaha. Fallen trees damaged a number of homes and vehicles.	Lincoln Co. North Platte	trees in the area was reported.  09 1810CST 0 0 5 4 Hail (1.75)  Hail of up to one and three-quarter inch diameter fell in North Platt denting wehicle roofs and damaging crops and gardens.
Keith Co. 1ElN Lemoyne	06 1728CST 0.1 20 0 0 1 1 Tornado (FO) A tornado touched down briefly in open country 1 mile east and	Dundy Co. Benkelman	09 1810CST 0 0 4 4 Hail (1.75) One and three-quarter inch hail fell around Benkelman, damaging
Channy C-	1 mile north of Lemoyne.	Burt Co.	crops and a few roofs.
Cherry Co. 9W6N Wood Lake	06 1830CST 0.3 30 0 0 4 1 Tornado (FI)  A tornado touched down on a ranch 9 miles west and 6 miles north of Wood Lake, destroying a barn and damaging fence.	Craig	Wind gusts to 70 m.p.h. were reported at Craig with trees and power lines damaged.
Arthur Co. 3S Arthur	06 1908CST 0 0 1 2 Hail (1.75)  One and three-quarter inch hail fell in open rangeland 3 miles south of Arthur.	Washington Co. Herman and Blair	09 2330CST 0 0 .3 2 Thunderstorm Wind (52) Winds gusted to around 60 m.p.h. at Herman and Blair, causing minor property damage.

	<del></del>	7	
PLAÇE	TIME - LOCAL STANDARD - LOCAL OF STANDARD - LOCAL OF STANDARD - LOCAL STANDARD - LOCAL OF STANDARD - LOCAL STANDARD - LOCAL OF STANDA	PLACE	TIME - LOCAL STANDARD STANDARD STANDARD STANDARD STANDARD STANDARD STANDARD STANDARD CROPS
	TIME - LOCA STANDARD LENGTH OF PATH (MILES) WIDTH OF PATH (TARDS) KILLED ROPERTY CROPS CRO		TIME - LOCA STANDARD CROPS STANDARD CROPS
NEBRASI	<b>(A</b>	NEBRAS	KA
Cherry Co. 7N Valentine	10 1805CST 0 0 2 2 Hail (0.75)  Three-quarter inch hail was reported 7 miles north of Valentine	Cherry Co. 2N Kilgore	24 1130CST 0 0 0 0 Funnel Cloud  A funnel cloud was reported 2 miles north of Kilgore.
Cherry Co. Valentine	with minor damage.  10 1830CST 0 0 3 2 Hail (0.75)  Three-quarter inch hail fell in Valentine, causing minor damage.	Pierce Co. Osmond	24 1447CST 0 0 3 4 Hail (1.75)  One and three-quarter inch hail damaged property and crops at Osmond.
Grant Co. Ashby	10 2125CST 0 0 2 2 Hail (0.75)  Three-quarter inch hail fell at Ashby. No damage was reported.	Madison Co. Norfolk	24 1635CST 0 0 4 1 Thunderstorm Wind Wind gusts blew down trees and power lines in Norfolk.
Cherry Co. Valentine	10 2309CST 0 0 3 2 Thunderstorm Wind (55)	Stanton Co. 5NE Norfolk	24 1640CST 0 0 3 4 Hail (1.00) One-inch hail damaged crops and some roofs 5 miles northeast
	Wind gusts to 63 m.p.h. were measured near Valentine. Only minor damage to property was reported.	Madison Co.	of Norfolk.  24 1650CST 0 0 4 3 Thunderstorm Wind,
Brown Co. 18S14W Ainsworth	10 2330CST 0.5 30 0 0 5 1 Tornado (F1)  A tornado touched down at Willow Lake 18 miles south and 14 miles west of Ainsworth, damaging cabins, blowing boats ashore and	Norfolk and Madison	Hail (0.75)  Three-quarter inch hail was reported in Norfolk and trees and power lines were blown down in Madison.
Brown Co. 27SW Ainsworth to	damaging satellite dishes.   10 2335CST-	Boone Co. Albion	24 1655CST 0 0 5 2 Thunderstorm Wind The roofs were blown off of several buildings and considerable
205 Long Pine	Winds blew a garage 200 yards and a gain bin a quarter of a mile on a ranch 27 miles southwest of Ainsworth. Trees were blown down 25 miles south of Ainsworth, and 20 miles southeast of Ainsworth, windows were blown in in a home and trees and a TV	Cuming Co. Wisner and Bancroft	tree damage was reported at Albion.  24 1710CST 0 0 4 2 Thunderstorm Wind Winds caused considerable tree damage at Wisner and Bancroft.
Rock Co.	antenna were downed. At 20 miles south of Long Pine, wind-driven hail broke out windows and damaged crops.  11 0010CST 0 0 6 3 Thunderstorm Windows	Dakota Co. South Sioux City	24 1710CST 0 0 4 2 Thunderstorm Wind Trees and power lines were damaged by strong wind gusts in
Bassett	Strong winds damaged the roofs of many homes, and downed trees and power lines in Bassett.	Platte Co. Columbus	South Sioux City.  24 1720CST 0 0 3 1 Thunderstorm Wind Wind gusts blew down trees in Columbus.
Boyd Co. Butte and Spencer	Winds estimated 80 to 100 m.p.h. damaged building roofs, blew out Windows, damaged outbuildings, and uprooted trees around Butte. A garden shed was destroyed and considerable tree damage was reported at Spencer, and 65 m.p.h. winds were reported at Lynch. Wind-driven hail to three-quarter inch in diameter damaged crops.		
Holt Co. Stuart	11 0100CST 0 0 4 2 Thunderstorm Wind	1   26 NEVADA	
Dawson Co. 4E Cozad	17 1615CST 0.5 40 0 0 5 2 Tornado (F1) A tornado touched down 4 miles east of Cozad causing damage to two farms. A number of outbuildings were destroyed, trees were uprooted, and the roof of a farm house was damaged.	Humboldt County	01 1345PST 0 0 0 0 0 Hail (0.75) An off-duty meteorological technician reported 3/4 inch diameter hail 3 miles southwest of Winnemucca. There were no reports of damage.
Dawson Co. 10N Cozad Franklin Co.	17 1700CST 0 0 4 4 Thunderstorm Wine Strong winds downed trees and damaged farm outbuildings and crops 10 miles north of Cozad.  17 1900CST 0 0 3 5 Thunderstorm Wine	Carson City	01 1415PST 0 1 0 0 Lightning A 42-year-old man was struck by lightning while seeking shelter from a thunderstorm under a large tree in central Carson City. The bolt passed from the tree through his right arm and torso, then exited to the ground via his left leg. It burned a 5 Inch hole in
Naponee to Riverton Franklin Co.	Strong winds and small hail caused heavy crop damage from around Naponee east to around Riverton.  17 2100CST 0 0 4 5 Flash Flood		his shirt, melted his left polyester sock, and split the sole of his shoe. It left him unconscious for a few minutes and paralyzed for about an hour. He received minor burns over his body, but no lasting injury.
	Excessive rain of near 9 inches fell around Macon and 6 inches at Franklin. Flooding damaged crops, eroded soil, and washed out roads. Thompson Creek was pushed out of banks.	Churchill County	01 1515PST 0 0 0 0 Hail (1.00) One-inch diameter hail was reported by the public in Fallon. There were no reports of damage; however, there were power outages around the town that were associated with the thunderstorm
Lancaster Co. Lincoln	19 Afternoon 1 0 0 Heat A man was found dead of heat stroke in a Lincoln park as the high temperature reached 96 degrees. M320.	NVZ001-003-004	activity.  16 1200PST 0 0 3 0 High Winds
Cherry Co. 26N Ashby	20 1915CST 0 0 2 4 Hail (1.75)  One and three-quarter inch hail was reported 26 miles north of Ashby with damage mainly to rangeland hay. Hail to various sizes accumulated up to one foot deep.  23 1830CST 0 0 3 4 Hail (2.00)	Western Nevada	A strong, cold upper low digging into the state from the northwest kicked up winds over most of Nevada. The strongest winds were in the western part of the state during the afternoon. Verdi, 12 miles west of Reno, had gusts estimated at between 50 and 60 mph that uprooted a large tree. Reno had a peak gust of 44 mph and Winnemucca had one of 43 mph. The winds produced a dust storm along Interstate 80, 10 miles west of Fernley. Visibilities were reduced to zero which caused a few traffic accidents.
2N Crookston Cherry Co.	Two-inch hail caused crop and some property damage 2 miles north of Crookston.  24 1125CST 0 0 4 4 Hail (2.75)	Nye County, 25 SW Mercury	16 1605PST 0.2 10 0 0 0 Tornado (FC) An NWS spotter reported a small tornado moving east to west about
7N Nenzel	Two and three-quarter inch hail broke windows and damaged roofs and siding on ranch buildings 7 miles north of Nenzel. Crops also suffered damage.		25 miles southwest of Mercury. The tornado's funnel was breaking up when it was spotted. The area is unpopulated, so no damage occurred.

PLACE	NO. OF ESTIMATED DAMAGE		NO. OF ESTIMATED!
	TIME D. LOCAL STANDED CHARACTER OF PATH (YARDS) DESCOND CHARACTER OF PATH (YARDS) CHARACTER OF STANDED CHARACTER O	PLACE	TIME - LOCAL STANDARD LENGTH OF PATH (MILES) WIDTH OF PATH (MILES) WIDTH OF PATH (MILES) CROPS - REVENUE OF PATH CROPS - STANDARD CHARACTER OF STANDARD CROPS - CHARACTER OF STANDARD CHARACTER OF STA
NEVADA		NEW JE	RSEY, Northern
NVZ003-004-005-006-   1	L7 0100PST 0 0 4 0 High Winds	Middlesex County	14 1500EST Short 7 0 0 0 0 Tornado (FO)
Southern Iwo-Inites	The cold upper low from the previous day remained over northeast California. As a result, strong winds blew over much of the		A small tornado touched down near an industrial park just east of
or Nevada s	southern two-thirds of Nevada. Feak gusts of 44 mph in Reno and 53 mph in Ely were recorded. Some damage such as signs that were	Bergen County	South Brunswick. It was only on the ground for about 10 seconds.  14 1513EST 0 0 0 Thunderstorm Wind
	blown down and shingles that were torn from roofs, was reported from around the state. Blowing dust occasionally reduced	bergen sount)	A severe thunderstorm downed several large trees in Garfield,
	visibilities along roadways throughout much of the state.  28 1425PST 0 0 3 0 TSTM Wind (61)	Monmouth County	14 1517EST 0 0 ? 0 Thunderstorm Wind
A	A spotter at the Cal-Nev-Ari airport south of Searchlight reported		A severe thunderstorm downed numerous large trees in the town of Roosevelt.
a	gusts of up to 70 mph and zero visibilities in blowing sand and dust. Brief heavy rains accompanying the storm produced localized street flooding. No major damage was reported.	Middlesex and Monmouth Counties	14 1530 to 0 0 ? 0 Flash Flood 1600EST
· '		Monmouth Councies	Heavy rains caused flash flooding in the towns of Piscataway in Middlesex County and Freehold, Marlboro and Manalapan in Monmouth County.
		Sussex County	19 1325EST 0 0 0 0 Hail (1.75)
27 NEW HAMPS	HIRE		Golfball size hail fell at Vernon.
Cheshire Co. Keene	10 1500EST 0 0 2 0 TSTM Wind	Passaic County	19 1345EST 0 0 ? 0 Thunderstorm Wind Severe thunderstorm downed several large trees and power lines in
,	A severe thunderstorm produced winds that knocked down several trees. $ \\$		Newfoundland. Some homes were damaged.
Carrell Co. Bartlett	10 1630EST 0 0 5 0 Lightning	Morris County	19 1355EST 0 0 ? 0 Thunderstorm Wind Severe thunderstorm downed several large trees in Butler.
1	Lightning caused many fires and power outages. At the Christmas Mountain Condominiums, damages were estimated at \$400,000.	Passaic County	19 1415EST 0 0 ? 0 Thunderstorm Wind
Hillsborough Co. Goffstown	10 1815EST 0 0 2 0 TSTM Wind		Severe thunderstorm downed large trees and power lines in Wayne and Clifton.
	A severe thunderstorm produced winds that took down several trees, causing traffic disruptions. $% \left\{ 1\right\} =\left\{ 1\right\} =\left\{$	Essex County	19 1438EST 0 0 ? 0 Thunderstorm Wind
Coos Co. Lancaster and	22 1700EST 0 0 4 0 Lightning		(G58) Severe thunderstorm downed large trees in West Orange and the wind gusted to 58 knots (67mph) at Newark Airport.
S. Whitefield	Lightning struck a 25-pair cable leading to Mutual Aid Communications Facility in Lancaster. The cable was destroyed and backup communications had to be used for l½ days. A large oak tree on Middle Street in Lancaster was struck by lightning, causing limbs a	Somerset County	24 2000EST 0 0 ? 0 Thunderstorm Wind
	branches to fall on several cars. In South Whitefield, one residence lost most of its electrical appliances when lightning traveled in from an electric fence to the household current entrance box.	Warren County	Severe thunderstorm downed large trees and power lines across sections of Somerset County.  26 1000EST Short 10 0 0 ? 0 Tornado (FO)
	*		A tornado touched down briefly at Blairstown. Several large trees and power lines were downed. The damage was mainly confined to the Gaisler Road and Mohicar Road intersection.
		Warren County	26 1000EST 0 0 ? 0 Thunderstorm Wind (678)
28 NEW JERSEY,	Northern		At Blairstown Airport the wind gusted to 78 knots (90mph) before the anemometer broke. Two aircraft were damaged.
''' ''	Ol 1830 EST 0 0 ? 0 Thunderstorm Wind	Union County	26 1000EST 0 0 ? 0 Thunderstorm Wind
] 12	Severe thunderstorm with winds estimated at 100 mph, downed several large trees and power lines in Stockton, New Jersey, One 5 foot iiameter tree fell on a house, completely destroying the structure.		Large trees and power lines were downed across sections of Union County.
1	08 2350EST 0 0 ? 0 Hail (1.0)	Sussex County	26 1000EST 0 0 ? 0 Thunderstorm Wind
	Thunderstorm Wind		Large trees and power lines were downed across sections of Sussex County.
M	Monroe was hardest hit, with many trees and power lines down. At a shopping center, part of a roof was blown off along with an air-	Warren County	26 1015EST 0 0 ? 0 Thunderstorm Wind
į l	conditioning unit. One-inch hail fell at Spotswood.  O 0 ? O Thunderstorm Wind		Large trees and power lines were downed across sections of Warren County. $ \\$
A	A severe thunderstorm downed numerous trees in a two block area in	Morris County	26 1025EST 0 0 ? 0 Thunderstorm Wind
1	Freehold. O9 1400 to 0 0 ? 0 Flash Flood		Large trees and power lines were downed across sections of Morris County.
Counties	1500EST Chunderstorms dumped very heavy rains across Bergen and Passic	Union County	26 1040EST 0.5 25 0 0 ? 0 Tornadó (F1)
S	counties. At Carfield in Bergen County, 5.20 inches fell in one hour- several cars in both counties were submerged due to the rapid counties.		A tornado ripped through the town of Mountainside. Large trees and power lines were downed. Extensive damage was done to numerous homes and cars.
· 1	12 1650EST 0 0 0 C Thunderstorm Wind	Hunterdon County	26 1045EST 0 0 ? 0 Thunderstorm Wind
Morris and Essex 1	14 1400 to 0 0 ? 0 Flash Flood		Large trees and power lines were downed across sections of Hunterdon County.
f	1430EST leavy rains, as much as 4 inches in a very short time, caused Flash flooding in the towns of Chatham in Morris County and Orange, Bloomfield and Roseland in Essex County.	Union County	26 1100EST 0 0 ? 0 Thunderstorm Wind
Union County 1	14 1450EST 0.1 7 0 0 ? 0 Tornado (FO)		Large trees and power lines were downed across sections of Union County. Hardest hit were the towns of Summit and Kennelworth.
b b	a small tornado touched down briefly in the western sections of Westfield, New Jersey. The damage was mainly confined to an area one slock wide and about 3 blocks long. Numerous trees were downed and 15 to 20 residential structures were damaged.	Union County	26 1115EST 0 0 0 0 Hail (1.00) One-inch hail fell at Union Township.

			JULY 1987
PLACE	TIME - LOCAL STANDARD LENGTH OF PATH (VAROS) MILLED ROPERTY CROSS	DATE  TIME - LOCAL STANDARD LENGTH OF PATH (WILES) WIDTH OF PATH (WARDS) RILLED ROPERTY CROPS CR	CHARACTER OF STORM
NEW JE	RSEY, Northern	NEW JERSEY, Southern	
Somerset County	26 1115EST 0 0 ? 0 Thunderstorm Wind Large trees and power lines were downed across sections of Somerset County, Some homes were damaged.	Vineland 14 1445EST ? ? 0 0 ? ? Tornac A funnel cloud aloft was reported just south of Centret	
Middlesex County	26 1130EST 0 0 ? 0 Thunderstorm Wind Large trees and power lines were downed across sections of Middlesex County. Some homes were damaged.	is near Parvin State Park. Simultaneously, a tornado why a farmer in the outskirts of Vineland.  Burlington County,  3 NNE Pemberton Thunderstorm winds brought down power lines and large to	√ind
Monmouth County	26 1130EST 0 0 ? 0 Thunderstorm Wind  Large trees and power lines were downed across sections of  Mommouth County. Some homes were damaged.	and Chesterfield at Juliustown in Springfield Township and in Chesterfield Chesterfield Township between 05:15 pm and 05:30 pm EDI	eld in F.
Warren County	30 1405EST 0 0 0 0 Thunderstorm Wind Large trees were downed across extreme northwestern Warren County.	Ocean City  Thunderstorm winds brought down power lines in Ocean Ci  Atlantic County.  Linwood  A tornado skipped along a half-mile track, uprooting an off trees and ripping out a brick wall. Hail was also Three people received injuries.	ity. do (F2) nd snapping
28 NEW JERSEY	f, Southern	Mercer County, 8 NE Trenton A large tree and many large tree limbs were blown down thunderstorm winds northeast of Trenton near Lawrencevi	by
Burlington County, 8 NW McGuire AFB	02 1730EST 1 66 0 0 5 0 Tornado (F1) Minor to moderate damage was done to 15 homes where the tornado had touched down. Portions of roofs were off of most of them. A shed and a camper were also damaged, and many trees were downed.	Mercer County:   2.5 N Hopewell   26   1102E5T   0 0 ? ? Hail (   1 N Princeton   26   1115EST   0 0 2 0 TSTN W   Thunderstorm winds brought down large tree limbs just n	vind north of
Mercer County	02 1800EST 0 0 4 0 Flash Flood Heavy rain of up to 5 inches caused widespread roadway and other drainage flooding. Small stream flooding also occurred. One of these was the Shabbunk Creek which flooded an apartment complex in Ewing Township, just north of Trenton. The Assunpink Creek also flooded and was over flood stage from 11:30 pm EDT on the 2nd until 10:00 am EDT on the 3rd. The creek crested at 06:30 am EDT.	Princeton. Three-quarter inch diameter hail was report Hopewell.  Burlington County: 3 SE Riverside 26 1215EST 0 0 ? ? Hail ( 26 1235EST 0 0 3 0 YSTM W  Thunderstorm wind gusts pushed over one empty trailer, house trailer, and several trees in Rochling, which is of Burlington. Dime size hail fell 1 to 2 miles southe	(0.75) Wind one small northeast
Cumberland County, Port Norris	11 1315EST 0 0 ? ? Hail (1.75) Colfball size hail was reported at Port Norris.	Bridgeboro, which is to the southeast of Riverside.  Salem County:	
Burlington County, Marlton  Cumberland County,	12	Pennsville 26 1458EST 0 0 3 0 TSTM W Quinton and 76 1514EST 0 0 3 0 TSTM W Alloway Thunderstorm wind gusts uprooted several trees and were at 70 mph at the Pennsville Municipal Building. Winds power lines in the Quinton and Alloway areas.	measured
3 W Bridgeton  Camden County,	Lightning struck and killed a girl as she was heading for cover when a storm interrupted harvesting on a farm. F170  12 1600EST 0 0 3 0 TSTM Wind	Burlington County, Greenbank Thunderstorm wind gusts of 60 mph or more and small hair reported.	i
Cherry Hill  Burlington County,  Cinnaminson	Strong thunderstorm winds downed power lines.  12 1600EST 0 0 3 0 TSTM Wind Strong thunderstorm winds brought down large tree limbs.	Ocean County: 4 W Tuckerton 30 1515EST 0 0 ? 0 Hail ( Manahawkin 30 1600EST 0 0 ? 0 TSTM W 3 NW Manahawkin 30 1600-1700EST 0 0 4 0 TSTM W	/ind, (0.75)
Gloucester County, Woodbury	12 1600EST 0 0 3 0 TSTM Wind Strong thunderstorm winds brought down large trees.	2 SW Point 30 1640EST 0 0 3 0 TSTM W Pleasant Colfball size hail was reported west of Tuckerton at 04 Thunderstorm wind guets of up to 60 mph and dime size h reported at Manahawkin at 05:00 mp EDT. Widespread uti	Vind 4:15 pm EDT. nail were ility lines
Mercer County, Hightstown	12 1650EST 0 0 2 0 TSTM Wind Thunderstorm winds brought down trees and tore off portions of roofs in the Hightstown and East Windsor areas. Heavy rain of up to 2.5 inches caused considerable roadway and other drainage flooding.	and trees were downed in Stafford and Barnegat counship 05:00 pm and 06:00 pm EDT. This area is approximately radius around a point 3 miles northwest of Manahawkin. storm wind gusts also downed power lines southwest of P Pleasant at 05:40 pm EDT.	a 5-mile Thunder-
Burlington County: Willingboro Palmyra Willingboro	14 1400EST 0 0 ? 0 TSTM Wind (52) 14 1410EST 0 0 ? 0 TSTM Wind (52) 14 1430EST 0 0 3 0 TSTM Wind Thunderstorm wind gusts of 60 mph were reported in Willingboro and Palmyra at 03:00 pm EDT and 03:10 pm EDT, respectively. At around 03:30 pm EDT, wind gusts brought down large tree limbs and power lines in Willingboro.	Mercer County, Mightstown	Wind Wind aretown.
Salem County, 6 E Woodstown	14 1415EST 0 0 3 0 TSTM Wind Thunderstorm winds downed a large tree and power lines.	Scattered utility lines were downed by wind in Ocean To	ownehlp.
Mercer County, Trenton and Ewingville	14 1440EST 0 0 3 0 TSTM Wind, Flash Flood Thunderstorm winds downed trees and power lines. Heavy rain caused flooding of streets and small streams, Shabukunk Creek flooded roadways and apartments, and washed out one bridge.		
Camden County, Lindenwold	14 1445EST 0 0 3 0 TSTM Wind Thunderstorm winds downed tree limbs and power lines.	• •	

	NO. OF ESTIMATED	<u> </u>	NO. OF ESTIMATED!
	PERSONS DAMAGE		
PLACE	TTME - LOCAL STANDARD LENGTH OF PATH (WILED MIDTH OF PATH (YARDS) CROPS	PLACE .	TIME LOCAL STANDARD LENGTH OF PATH MILLED CROPS
29 NEW MEXIC	:0	NEW YO	RK, Central
Curry and Roosevelt Counties (NMZ002)	01 0200MST 0 0 0 5 Hail (1.00-1.50) Sorghum, wheat, and small acreages of cotton were damaged by a hailstorm. The most significant damage occurred from Grady to Pleasant Hill in Curry County, and scattered damage occurred in Roosevelt County.	Ulster County	10 1605EST 0 0 5 2 Thunderstorm Wind Trees were uprocted in Ellensville during a violent chunderstorm. Power to 2500 homes was disrupted between 1650EST and 1700EST due to downed power lines.
Luna County (NMZ009)	13 ? 0 0 4 ? Thunderstorm Wind (50) High winds pushed over a few weaker structures just south and east of Deming.	Clinton County: West Chazy Champlain Champlain	10 2107EST
Chaves County (NMZ003)	19 2205MST 0 0 0 0 Flash Flood Water ran across mostly rural roads south and east of Roswell along State Highways 172 and 31.	Dutchess County Dutchess County Ulster County	11   1530EST
Bernalillo County (NMZ008)	20 1500MST 0 1 0 0 Flash Flood A woman was swept down an arroyo in Albuquerque before she could escape from her vehicle which was lifted and carried downstream by floodwaters. Another female passenger and her nineteen-month-old son were rescued just before the car was		Hudson Valley. One woman in East Fishkill, Dutchess County, and three men in Poughkeepste were victims of heat stress. Thunderstorm winds brought down trees and power lines throughout the lower Hudson Valley. Hardest hit was the town of Ellenville, where 2100 homes had lost power.
Bernalillo County (NMZ008)	washed away.  21 1730MST 0 0 0 0 Flash Flood A woman's car was swept down an arroyo in Albuquerque — the same	Washington County	11 1600EST 0 0 5 5 0 Thunderstorm Wind 11 1600EST 0 0 3 0 Lightning Thunderstorms ripped the tiny village of Ft. Edward apart. One home was demolished when a tree was uprooted and fell upon it. The same was true for a car near the Hudson River. One roof was
	arroyo mentioned in the entry above — as she tried to drive across it. She left the car just before it washed away. The car was found about one mile from the Rio Grande River under seven feet of water.	Saratoga County	blown off of its building which resulted in a local road being blocked off. One phone pole was hit by lightning which resulted in a minor fire.  11 1627EST 0 0 4 0 Thunderstorm Wind
Dona Ana County (NMZ009)	22 1630MST 5 10 0 0 5 0 Tornado (FD) A tornado damaged several barns, uprooted trees, and destroyed some sheds. It occurred in the town of Garfield between Truth or Consequences and Las Cruces.	Jaracoga Godaley	11 1708EST 0 0 4 0 Thunderstorm Wind Trees were blown down in the northern portion of the county and high winds were reported in the town of Malta.
Bernalillo County (NMZ008)	24 1530MST 0 0 0 0 Flash Flood Heavy storms caused normally dry arroyos to fill up to 8 feet in depth in a short period in the Albuquerque metro area.	Chenango County  Delaware County	11 1730EST 0 0 4 0 Thunderstorm Wind Trees were blown down in the town of Bainbridge.  11 1805EST 0 0 3 3 Thunderstorm Wind
Luna County (NMZ009)	28 2021MST 0 0 0 0 Flash Flood The sheriff reported considerable street flooding that resulted from about one and a half inches of rain that fell in one hour.	Saratoga County: Milton Center Corinth	Trees were downed in the northern portion of the county.  12 1210EST 0 0 4 0 Thunderstorm Wind 12 1220EST 0 0 4 3 Thunderstorm Wind Thunderstorm Wind Thunderstorm winds blew down trees in Milton Center; while in the town of Corinth, trees and power lines were blown down.
30 NEW YORK,	Coastal NONE REPORTED	Putnam County	12 1700EST 0 0 5 0 Thunderstorm Wind Trees were blown down in the town of Brewster. Power lines were knocked down by strong winds in the towns of Greenwood Lake, West Milford, Fine Island, and Chester and in the Village of Tuxedo.
30 NEW YORK.	Control	Chenango County	12 1900EST 0 0 4 0 Thunderstorm Wind Trees were reported down in Bainbridge.
Dutchess County	08 1604EST 0 0 3 4 Hail (1.00)	Delaware County	12 1930EST 0 0 4 0 Thunderstorm Wind Trees were blown down in the town of Walton.
	108 1604EST 0 0 0 5 0 Thunderstorm Wind Twenty thousand homes were left without power after a powerful thunderstorm rolled across the area. Hardest hit was the Spacken- kill area of Poughkeepsie. The hail lasted for approximately 20 minutes. The winds were powerful enough to move large, wheeled garbage containers from a grass area, through a parking lot, to the opposite end of the parking area.	Herkimer County: Little Falls Little Falls	13 1700EST 0 0 4 4 Thunderstorm Wind 13 1710EST 0 0 4 0 Lightning A fast-moving thunderstorm passed through the village of Little Falls on this Monday afternoon. Large trees were snapped off at their base and lightning hit a transformer. The thunderstorm also knocked down two power lines.
Tioga County	08 1630EST 0 0 2 4 Thunderstorm Wind Convective winds flattened a local corn and bean crop in Oswego. Three trees were also reported as blown over. Rain amounting to 1.10 inches fell during the brief but powerful storm. Power was also out for five hours because of downed power lines.	Oneida County	14 1300EST 0 2 6 0 Thunderstorm Wind 14 1330EST 0 1 3 0 Lightning Ball lightning struck a home in which a furnace repairman was installing a new oil tank. The ball travelled through the house and down the stairs into the cellar. There it hit the oil tank
Vister County: countywide Goshen	09 1530EST 0 0 5 4 Thunderstorm Wind 09 1550EST 0 0 4 0 Flash Flood An explosive thunderstorm created havoc around Ulster County. Unofficial rainfall estimates of four to six inches were received following the hour-long thunderstorm. Rapid flooding along local streams and creeks in Middletown resulted. Some minor flooding		and passed through the repairman to the ground. After climbing to the main floor and checking on the owner, the repairman passed out. EMT's stated that the man was lucky to be alive. When the repairman got home, he found his own home to be without power due to a lightning strike. Winds around Oneida County brought down trees and power lines. In one case a mobile home was crushed when a tree fell on it, injuring two readents slightly.
	was also reported in Wurtsboro, Sullivan County. Winds also took their toll, bringing down a 180-year-old historical tree at the "Historic" race track in the town of Goshen.	Delaware County: countywide Sidney	14 1600EST 0 0 4 0 Thunderstorm Wind 14 afternoon 0 0 5 2 Flash Flood
Saratoga County Tioga County	09   1700EST   0 0 3 0 Thunderstorm Wind		An aftermoon thunderstorm produced heavy rains and strong gusty winds. The wind damage consisted of downed trees and power lines. Meanwhile, water from the flooded Weir Ravine tore up local roads and the Bendix Connector Plant in the village of Sidney. Also flooded was the public library. Local police took to patrolling
.10ga douncy	Trees were reported down in Oswego.		on foot since police cruisers could not move through the flood area. The local fire department pumped out eight cellars.

	NO. OF ESTIMATED' DAMAGE			- AL	РАТН	r		. OF	OF ESTIMATED!			
PLACE	CHARACTER OF OF	PLACE		ου 1 Ω	OF PA	PATI DS)	1	T			CHARACTER OF	
	TIME - LOCAL STANDARD CENCTH OF PATH (TARES) WIDTH OF PATH (TARES) KILLED PROPERTY CROPS C	FLACE	DATE	TIME - LOCAL STANDARD	LENGTH OF (MILES)	WIDTH OF PATH (YARDS)	KILLED	INJURED	PROPERTY	CROPS	STORM	
NEW YO	RK, Central	NEW YO	ORK, C	Central								
Orange County	15 1403EST 0 0 5 0 Lightning Lightning struck a power station in Goshen, leaving 4400 powerless.	Schoharie County: Schoharie Middleburg		1448 <b>E</b> ST 145 <b>5E</b> ST			0	0	3	0	Hnil (1.50) Hail (1.50)	
Dutchess County	15 afternoon 0 0 3 0 Hail (1.50) 15 afternoon 0 0 5 3 Thunderstorm Wind 15 afternoon 0 0 3 0 Lightning	Middleburg Gallupville Albany County: Knox	25	1455EST 1502EST 1502EST		1	0	0	0	0	Thunderstorm Wind Hail (1.00) Hail (1.00)	
	Hail and thunderstorm winds combined in bringing down trees and power lines between Poughkeepsie and Wappingers Falls. Hail stones the size of golf balls were reported in Poughkeepsie, while they	Westerlo Columbia County: Kinderhook	25 : 25 :	1530EST 1610EST			0	0	3	2	Thunderstorm Wind Thunderstorm Wind	
	were dime size in Wappingers Falls. Lightning also hit one power pole.	Germantown	A powe	the late	e afte	rnoon.	lligh	wind	s blew	e and	Thunderstorm Wind Albany counties trees in	
Dutchess County	16 early afternoon 0 0 3 3 Thunderstorm Wind  An early afternoon thunderstorm with unofficial winds of 80 mph uprooted two-foot diameter oak trees.		was re	ported a	s golf	ball s				tions.	County. Hail	
St. Lawrence County:		Otsego County, Schenevus Green County	1	1700EST- 1707EST 1753EST	short	?	0	0	4		Tornado (F0) Thunderstorm Wind	
Ogdensburg Gouverner Stockholm	18     1530EST     0     0     3     3     Thunderstorm Wind       18     1530EST     0     0     3     3     Thunderstorm Wind       18     1755EST     0     0     4     2     Thunderstorm Wind	Dutchess County, Amenia	25 I	1902EST- 1910EST	70** o toucl		ő m in	0 the t	5	4	Tornado (FO) evus, bringing	
Dekalb Gouverner	18     1.759EST     0     0     3     0     Thunderstorm Wind       18     1810EST     0     0     2     0     Thunderstorm Wind       Trees and power lines were downed on Routes 11B, 812, and 58.       18     2218EST     0     3     2     Thunderstorm Wind		down to storm County severe Unconf	downed po to The se wind dar firmed re	about a ower 1: ame st mage i ports :	a one a ines an orm lat n Mille also ir	icre a id tre ier pr irton, idicat	rea. es in roduce , both ed po	Winds the teld a tell in Duessible	from own of ornado itchese activ	the same thunder- Windham in Greene in Amenia and	
Saratoga County	18 2218EST 0 0 3 2 Thunderstorm Wind 18 2220EST 0 0 4 0 Thunderstorm Wind High winds were reported in Stillwater. Damage consisted of downed large tree limbs and a downed ornamental tree. Pea size hall fell as well. In Clifton Park, downed tree limbs and power	Ulster County: Slide Mountain	25 1	7, Massac	nusecc	s and r	0	0	1	0	Thunderstorm Wind	
Albany County	lines were also reported.  18 2223EST 0 0 0 0 Thunderstorm Wind	Saugerties Saugerties Saugerties	25 I 25 I	1820EST 1935EST 2230EST downed p	ower 1	ines in	0 0 0 1 Saug	0 0 0 gertie	3 3 3 s and	0	Thunderstorm Wind Thunderstorm Wind Thunderstorm Wind Mountain.	
arrany country	High winds were reported in the town of Colonie. Tree limbs and power lines were downed as a result of the winds.	Delaware County	25 1	1945EST hail fel			0	0	2		Hail (1.75)	
Rensselaer County	18 2250EST 0 0 0 0 High Winds A wind gust of 40 mph was reported in Averville Park, while a wind gust of 43 mph was reported in Stephentown.	Dutchess County: Rhinebeck Hyde Park	25	1945EST 2000EST			0	0	3	0	Thunderstorm Wind Thunderstorm Wind	
Orange County	19 1200EST 0 2 5 7 Hail (2.00+) 19 1330EST 0 0 6 4 Thunderstorm Wind A very powerful thunderstorm hit the Pine Island area of Orange	5 N Poughkeepsie Millbrook	25 2 25 2	2230EST 2253EST and powe	r line	s were	0 0 downe	0	2 4	0	Thunderstorm Wind Thunderstorm Wind	
	County. Hail with a diameter in excess of two inches was reported. Considerable damage was done to lettuce, corn, apple, and onion crops. Lifetime residents could not recall such violent thunder- storms in over 50 years. The large hail stones also did consider-	Ulster County, New Paltz	25	2045EST			0	0	3	0	Thunderscorm Wind	
	able damage to barns, farm equipment, and homes. Two persons were injured from the hail, both having received minor cuts. High winds were reported countywide.	Sullivan County	- 1	2235EST were rep	orted	down 11	0 n the	0 town	4 of Mor		Thunderstorm Wind	
St. Lawrence County	Thunderstorms moved across St. Lawrence County. A storm especially created havoc in the city of Massena. Large trees and	Essex County	1	2245EST were dow	ned co	untywic	0 de fro	0 om 100	0 al thu		Thunderstorm Wind	
	several power lines were brought down. One home in Massena had all of its front windows blown out.	Orange County	1	2302EST	+ hum da		0	1			Lightning ust about midnight	
St. Lawrence County, Ogdensburg	1542EST		EDT. Commun	Lightnin nications n is exte	g bolt Cente	s from r in Ne	the s	storm	hit th Dama	ne coul	ty's Emergency the radio/phone one suffered minor	
	A small tornado touched down around the Black Lake Road section just outside of Ogdensburg. Damage consisted of an overturned mobile home and some minor damage to a small shed and farm equipment. Some damage also occurred to crops used for dairy feed. Approximately one and a quarter hours later, more thunderstorm	Warren County	26	1500EST were rep	orted	down ir	0 1 John	0 nsbury	4	3	Thunderstorm Wind	
	activity moved into the area, producing about four to six inches of rain in about an hour. The intense rain was very localized and resulted in some drainage flooding in the immediate area.	Saratoga County: Corinth Greenfield		1648EST 1710EST			0	0	4	0	Thunderstorm Wind Thunderstorm Wind	
Franklin County: Malone Brandon Santa Clara Tupper Lake	24   1615EST	Albany County, New Scotland	Trees	and powe			0	3	4		Lightning	
Tupper Lake	Strong gusty winds brought down trees and power lines throughout Franklin County, A weather observer in Malone measured a wind gust of 43 mph at 1615EST.		girls tree, ing ov bag, t	claimed then tra ver a roo melting i	not to velled t and t as i	have h throug the bol t moved	neard gh the lt fol d alor	any t root llowed ng, T	hunder system the a	r. The em. Or zipper It ther	n it. The three bolt first hit a se girl was sleep- of her sleeping passed to the	
Hamilton County	24 1920EST 0 0 5 3 Thunderstorm Wind High winds blew down trees and power lines in Lake Pleasant.		other and se	two girl cond deg	s who	were cl	Lose t	oy. A		ee gi	ls suffered first	
Herkimer County	24 1920EST 0 0 3 3 Thunderstorm Wind Strong winds took down trees and power lines in the town of Old Forge.	Schenectady County	Colfba report stripp damage power1	s indica ed of le consist	ted the aves, a ed of lators	at larg and sca cracked . Pato	e tre ttere l wind	e lim d pow lows,	bs wer er lin dented	in Dua e blow es wer l cars,	Hail (1.50) nesburg. Local on down, trees were e downed. Hail and broken visible four	

PLACE	TIME - LOCAL STANDARD LENGTH OF PATH (TARGES) WIDTH OF PATH (TARGES) WIDTH OF PATH (TARGES) CROPS CROP	PLACE	TIME - LOCAL STANDARD CROPS CR
NEW YO	RK, Central	NEW YOR	K, Western
Albany County	30 1740EST 0 0 3 0 Hail (1.50) Colfball size hail was reported in Westerlo.		26 0529 EST 0 0 3 0 TSTM Wind, Strong winds flipped a camping unit and damaged lightning several others in the town of Tuscarora. A
Greene County	30 1815EST 0 0 3 . 3 Hail (0.75) Hail was reported in Coxsackie and New Baltimore.	Niagara County	lightning bolt struck a small garage in Addison.  30 1349 EST 0 0 3 0 TSTN Wind 30 1440 EST 0 0 3 0 TSTM Wind
Dutchess County	30 2005EST 0 0 0 1 Hail (0.75) Hail was reported in the town of Millerton.	Genesee County Livingston County	30 1420 EST 0 0 3 0 TSTM Wind 30 1440 EST 0 0 0 4 0 Lightning 30 1500 EST 0 0 3 0 TSTM Wind 1618gara Falls International Airport reported 53-not winds and 1/2 inch hall. Alabama (Genesee
30 NEW YORK,	Western	A A L	county), Lakeville (Livingston County), and kron (Erie County) reported downed trees. Lightning ignited houses in the towns of lexander and Pembroke (Genesœ County).
Cattaraugus County	02 Morning 0 0 4 0 Rain Heavy rains caused road and basement flooding in towns of Hinsdale, Humphrey, and Allegany.	County (6 miles east of Buffalo)	30 1530 EST 1.5 15-60 0 1 6 0 Tornado (F2) A funnel cloud touched down 2 miles southwest of the Buffalo International Airport and moved southeast, skipping 3 times. Five homes suffered heavy damages. Owners of 130 homes claimed minor
Monroe County	0 0 4 0 Rain & Hail  Heavy thunderstorms poured up to 3.25 inches of rain and caused some street flooding in Rochester. At midnight, a stop-gap dam in Chill (suburb of Rochester) failed. Water rushed into a subdivi- sion, flooding basements and backyards of a dozen homes.	Ontario County	damages.  30 1615 EST 0 0 3 0 TSTM Wind, Strong winds and lightning strikes knocked down Lightning trees and power lines in Canandaigua and East Bloomfield.
Oswego County	14 1130 EST 0 0 4 0 Lightning A lightning bolt ignited a house in Palermo.		30 1630 EST 0 0 4 0 TSIM Wind  In the town of Eagle, strong winds tore the roof of a house and damaged the siding of another.
Jefferson County: Carthage Alexandria Bay Clayton Wellesley Island Lewis County:	18 1915 EST 0 0 4 0 TSTM Wind 18 1915 EST 0 0 4 0 TSTM Wind 18 1930 EST 0 0 4 0 TSTM Wind 18 1930 EST 0 0 4 0 TSTM Wind 18 2016 EST 0 0 4 0 TSTM Wind	Allegany County Allegany County	30 1756 EST 0 0 3 0 Hail (0.75) 30 1845 EST 0 0 3 0 Hail (0.75) Hail fell at Belmont and Belfast.
Croghan Beaver Falls New Bremen	18 2018 EST 0 0 4 0 TSIM Wind 18 2038 EST 0 0 4 0 TSIM Wind 18 2038 EST 0 0 4 0 TSIM Wind		
	Strong thunderstorm winds downed many trees and power lines in Clayton, Carthage, Lowville, Alexandria Bay, and Wellesley Island in Jefferson County and in Croghan, Beaver Falls, and New Bremen in Lewis County.	31 NORTH CARG	DLINA
Erie County	20 0130 EST 0 0 4 0 Lightning Lightning severed power lines in Orchard Park, cutting electricity to 1900 homes for six hours.	Springs area Alamance Co. North- western	03 1535EST 0 0 4 0 TSTM Winds 03 1942EST 0 0 ? ? TSTM Winds An isolated severe thunderstorm blev down trees and power lines
Wayne and Cayuga Counties	23 1535 EST 0 0 4 0 TSTM Winds Strong winds uprooted trees and broke power lines in the towns of Wolcott, Red Creek, and Victory.		in southern Wake County. There was also some damage to several homes and outbuildings and some windows were blown out. Trees were blown down by a storm in Alamance County.
Jefferson County: Alexandria Bay Clayton	24 1845 EST 0 0 4 0 TSTM Wind 24 1820 EST 0 0 4 0 TSTM Wind		04 1618EST 0 0 3 0 TSTM Winds  Trees, power lines, and outbuildings in a 1/8 mile path were damaged by thunderstorm winds.
Cape Vincent Lewis County: Lowville Glenfield	24	Fayetteville Catawba Co. Western	05     1710EST     0     0     3     0     TSTM Winds       05     1800EST     0     0     ?     ?     TSTM Winds       05     1930EST     0     0     3     5     TSTM Winds
	Strong winds downed trees and power lines in Alexandria Bay, Jefferson County; and in Glenfield, Watson, and Lowville in Lewis County.  Trees and power lines were downed by strong winds in Clayton and Cape Vincent. In Burnham State Park (near Cape Vincent), lightning slightly injured a man and a woman. A fallen tree damaged a trailer and a car. Lightning ignited a barn in Sackets Harbor.	Hoke Co. near Dundarrach	At the Fayetteville Generals baseball park, a 100 foot section of the advertising fence was blown down and parts of the stands were damaged by flying debris. 20 to 25 trees were snapped near the park. A few trees and power lines were blown down in western Catawba County, and numerous trees and power lines were blown down near Copeland. There, 20 acres of tobacco suffered extensive damage from the wind and small hall.  OF 1215EST 0 0 0 TSTM Winds  OF 1245EST 0 0 ? 0 TSTM Winds
Erie County	26 0400 EST 0 0 5 0 TSTM Wind, Rain Strong thunderstorm winds felled trees and power lines in the towns of Evans, Hamburg, Boston, Silver Creek, Orchard Park, Elma, West Palls, Springville, East Aurora, Wanakah, Angola, and Colden. Power outages affected South Buffalo. From 2 to 3 inches of rain fell and caused the Eighteenmile Creek to rise slightly above banks.	Northern Scotland Co. Laurinburg Bladen Co. near Elizabethtown	07 1317EST 0 0 3 0 TSTM Winds 07 1412EST 0 0 4 ? TSTM Winds Two trees were blown across a road in southeastern Hoke County. In northern Scotland County, trees blocked the roads preventing a fire department from responding to a lightning-related fire.
Genesee County	26 0445 EST 3 0 3 0 Lightning Three campers were killed while sleeping in their tents at Darien Lake, victims of a lightning strike. Sorch marks indicated that lightning first hit an aluminum pole of one tent, charred its two occupants, then arced to another tent aix feet away and electrocuted another person. Lightning M170, M180, M200.	a c c	This storm moved south into Laurinburg where several power poles and lines were blown down. The worst storm of the afternoon occurred across Bladen County. Nuch of the damage was concentrated near Elizabethtown. On one farm 3 large equipment sheds were destroyed along with the contents, including a cractor. Numerous trees and power lines were blown down across he area.

		CAL	РАТН	H	NO. PER	OF SONS		ATED!				CAL	РАТН	Ę		OF SONS		ATED!	
PLACE	DATE	TIME - LOCAL STANDARD	LENGTH OF (MILES)	WIDTH OF PATH (YARDS)	KILLED	INJURED	PROPERTY	CROPS	CHARACTER OF STORM	PLACE	DATE	TIME - LOCAL STANDARD	LENGTH OF 1 (MILES)	WIDTH OF PATH (YARDS)	KILLED	INJURED	PROPERTY	CROPS	CHARACTER OF STORM
NORTH C	AR	OLINA								NORTH	CAR	OLINA							
Beaufort Co, Washington	08 Power			n down	0 In ea				TSTM Winds TSTM Winds nty, and 2 tree er outage.	Columbus Co. Delco Brunswick Co. 10 NW Wilmington New Hanover Co. Wilmington	15	1045EST 1100EST 1138EST			0	0	? ? 0	? ? 0	Hall(1.75) Hall(1.75)
Surry Co, Lowgap Area	10	1 400 EST			0	0	3	?	TSTM Winds	Brunswick Co. Ocean Isle	15	1545EST			0	0	4	0	TSTM Winds
Iredell Co; Moores- ville, Nrn Lake Norman	Fence	owgap are	a. The	re were	e wide	esprea	d and	i long-	TSTM Winds, Lightning merous trees in lasting power Similar damage		prod seve teti Near	uced large re storm o nered,ligh	hall aused talrp ous tr	at seve some wi lanes w ees wer	ral i nd da ere f	ocati mage lipped	ons. at Oce o over	Later an Isl at th	pasta! NC. and in the day. a e. Two e airport. c drive-in was
	coma maa t	eported a were kill	round t	he nort	thern ng in	part	of La area	ke Nor	man: also 7	Surry Co. Southeast Cabarrus Co. Concord to Kannapolls	23	1600EST 1620EST			0	0	?	0	Hail(1.75) TSTM Winds
Carteret Co, Salter   Path Wayne Co, GSB		0346EST 1710EST			0	0	5 ?	0	Lightning Hall(0.75)	Caberrus Co. Kanna- polis Davidson Co. High	23	1620EST 1758EST			0	0	5	0	Lightning Lightning
Wayne Co, Northeast Wayne Co, North of	11	1730EST 1745EST				0	?	?	TSTM Winds Hail(0.75)	Rock Lake Davidson Co. near	23	1800EST			0	1	0	0	Lightning
Seven Springs Stokes Co; Danbury, Pinnacle	11	1920EST			0	0	?	?	TSTM Winds	Thomasville Rowan Co. Northern	23	1800EST			0	0	?	?	TSTM Winds
Wake Co; Cary,	burne AFB a over power to pr down	d. A sevend produce most of e	ere thu ed larg astern' the no	ndersto e hall Wayne ( rtheast	orm de there County t sect Isola	evelop e. Th y. It tion o ted st	ed no is si blew f the	ear Sey orm gr down count	lightning and mour-Johnson adually spread some trees and y and continued ces County blew		\$25 the in sto Con the gut bur kil	,000. and re was qui Cabarrus a rms caused cord to Ka re was als ters. and re 500 feet led two pe	In nor te a b and Dav numer nnapol o some yards. south ople a	thern R it of r ldson c ous tre is. In damage Light of the	owan elate ounti es an the to a ning Rowa red a	County d dam es. I d pow south few I struck n coun nother	y tree age. High w er lin ern pa homes k a ch nty li r in D	s were The won Inds fi es to : rt of 1 - most urch an ne. Li avidson	Cannapolis, by to windows, and caused it to ghtning also a County. Two
Raleigh Richmond Co. Grenaco Wake Co. Cary Columbus Co. Tabor City	12	1400EST 1400EST 1700EST			0 0 0	0 0 0	4 5 5	0	TSTM Winds Lightning TSTM Winds		Roci were pare	c Lake. T e standing ents were	hey, w under stunne	ith the some to but a	ir pa rees ppare	rents when the	. had the li not in	left ti ghtning jured.	island in High meir boat and p struck. The A teenage boy and injured by
Stanly Co, Albemarle Catawba Co, Newton		1830EST 2040EST			0	0	4 3	?	TSTM Winds TSTM Winds.	<b>.</b>	ligi	itning.					u was	SEEUCK	and injured by
Catawba Co; Malden, Conover	12	2055EST			0	0	3	?	Hall(1.75) Hall(1.75)	Forsyth Co. Clemmon:					0	0	4	4	TSTM Winds
Compaet	at a number destrainment of here of he	dealersh. er of hous royed (dan rous trees aco, near several on e was wide for many i m of the idents sti ite surve mated wel	ip were see fires mage \$80 s were to the Souutbuildiespread hours as day hit il belie y reveal into teral bus	damage in Ca 0,000). blown duth Car ings we damage sares Tabor eve a t led no the F1	d by ry, a Bar fown i colinate da in C guit o City cornace evide categor s, an	the wind at in room n south border in border in the later of the later	ind. leases we hern at A a Courstor lumbu the f rot arge	Light: t one: re blo Richm A barn lbemar nty: m. By s Coun area, ary wi used d wareho	un off and ond County at was demolished. le by wind. the power was far, the worst ty. Many but a thorough od. Winds were unset to a couple use. Late	Wake Co. near Wake Hertford Co. Ahoskie Northampton Co. Seaboard Halifax Co. Weldon	winn home bus 26 26 26 26 Some stor Seal Hall trai	is. Roofs and vehi iness were 1630EST 1827EST 2230EST 2350EST trees we ms moved coard most fax about liers were	re blom into Ni damage \$10.00 moved	veral lere dam ely dam ortham e was to o dama off the	arge aged.  0 0 0 in H pton o tre ge occeir fo	metal and p 0 0 0 ertfor and Ha es and currec oundat of NO	build plants  0 ? 4 rd Cou allifax d powe i to he	o o o o o o o o o o o o o o o o o o o	s. but at
Catawba Co. Newton Lincoln Co. 7 East		1 400 EST 1 430 EST			0	0	4	?	TSTM Winds TSTM Winds		abou	it 1/2 mll			b)own	down.			
Lincolnton Gaston Co. Cramerton Mecklenburg Co. near		1540EST 1600EST			0	0	3	?	TSTM Winds TSTM Winds	Pitt Co, between Ayden and Grifton Lenoir Co. Kinston	27	1500EST 1530EST			0	0	4	5	TSTM Winds
Huntersville Union Co, Northeast		1620EST			8	0	?	?	TSTM Winds	Pitt Co. Eastern Lenoir Co. 8 E Sever	27	1535EST			0	0	?	5	Hall(0.75) TSTM Winds
Mecklenburg Co. Charlotte		1624EST			0	0	3	0	TSTM Winds	Springs Craven Co, Vancebord	-	1545EST 1600EST			0	0	4	5 ?	TSTM Winds
Wake Co, Raleigh Stanly Co. Western	13	1630EST 1630EST			0	0	0 ? ?	0 ?	Hail(0.75) TSTM Winds	Lenoir Co. S of Kinston	27	1600EST			0	0.	4	5	TSTM Winds
Hoke Co, 1 1/2 SE Raeford	13	1915EST			u	U	r	ſ	TSTM Winds	Beaufort Co. Chocowinity New Hanover Co, 2 N	27	1600EST			0	0	?	?	TSTM Winds, Hail(0.75) TSTM Winds
	Count	ty. In L	Incoin C	County,	a ba	rn was	des	troyed	in Catawba , a canopy blown	Wilmington Onslow Co. Sneads	27	1700EST			0	0	4	0	TSTM Winds
	off a Trees north struct lsola cause Polic	a store. as and power mern Mecking tural daranted storm and some track estimated estimated estimated.	and ther er lines lenburg mage to m produc rees to ted the	County buildi ced lar be blo wind a	minor blown . At ngs a ge ha wn do t 75	wind down Chari t a co il in wn in to 80	dama in G lotte nstr Rale west mph	ge to saston there uction lgh, as ern St.	some homes. County, and in was some site. An nd another storm anly County. theast Union n Hoke County.	Ferry Jones Co. Wyse Fork area	Power during seas area deal	1730EST erful thun ing one of ean. Leno is, Crop of prope	the built and damage rty dam	esiest : Pitt co Was exi Page occ	sever ounti tensi curre	e weat es see ve in d at a	of eachemed to Pitt	4 stern h ays so be th County, school	TSTM Winds. Hall(0.75) forth Carolina far in the me hardest hit and a good near Grifton.
Hertford Co. just S Murfreesboro	1	1305EST			0	0	?	?	Hail(0.88)		Seve	ral vehic	les wer	e blow	n inte	o dito	hes i	n the c	ounty. More part of the
Gates Co. 5 S VA-NC Border		1315EST			0	0	0	?	TSTM Winds		Cour	ity. Exte	nsive p . The	roperty first	y dami evide:	age wa nce of	s rep	orted a ry dama	il across ging storm came
Gates Co. Northwest	Large coup! Count	hall was	orts of were a	large	trees	blown	dow	n in n	TSTM Winds nd there were a orthwest Gates ns that moved		from Wate larg in t	Kinston or was waite hall altown. Mea	where m st deep so was nwhile, border	nany tro in pao observe anotho east o	ees al rts o: ed. : er se f Sevi	nd pow f town The st vere s en Spr	er lin from orm la storm o	nes wer urban asted a develop This	e blown down. flooding, and bout 30 minutes ed near the storm caused an nd 1 mile in

									·····						<del></del>				r—	JULY 19
		OC AL	РАТН	Ħ.	NO. PER	OF SONS		ATED†				OCAL	PATH	AT#	NO PER	OF SONS		ATED1		
PLAÇE	DATE	TIME - LOCAL STANDARD	LENGTH OF (MILES)	WIDTH OF PATH (YARDS)	KILLED	INJURED	PROPERTY	CROPS	CHARACTER OF STORM	PLACE	DATE	TIME - LOCAL STANDARD	LENGTH OF	WIDTH OF PATH (YARDS)	KHLED	INJURED	PROPERTY	CROPS	٦	HARACTER OF STORM
NORTH C	AR	DLINA								NORTH	DAI	KOTA								
	llenc	th Barns	uera h	olown o	town a	nd cr	one is	oro ce	verely damaged -	Grand Forks County,	L 16	2137CST			n	0	6	0	וייים	(1.00),
	toba of K Comm beca Wilm Coun dama	coo was co Inston whe unications use of win ington tre ty one roo ged. Tree	empletel ere it a s were on no estim ees were of was d es were	y stri gain p ut. an ated a blown damaged blown	ipped. produc nd num ns hig n down i by t down	This ed and erous h as - one he win at Van	s stor other tree: 75 km e onto no an	rm cont area o s block ots o a hou d a car ro and	cinued to south of damage. ted roads Just north of use. In Onsiow r wash was also Chocowinity.	Grand Forks  Grand Forks County,  Grand Forks	Wir	d gusts to y of Grand ecially th	o 65 : d For hose	ks. The	ng wit	h 1-ine	ch ha	il, oc iderab	Tstm. curred	Wind G56 in the age to cars
									ees were blown nd-driven hail,	Adams County,	19	1920CST			0	0	0	0	Hail	(0.75)
Mecklenburg Co. Charlotte Union Co. N of	27	2035EST			0	0	?	0	Hail(0.75), TSTM Winds	Hettinger County, Regent	19	2007CST			0	0	0	0	Hail	(1.75)
Monroe Union Co. 10 S of	27	2110EST 2134EST			0	0	?	?	TSTM Winds	Sioux County; 21NE McIntosh, SD	19	2120CST							Punne	1 Cloud
Monroe Union Co. Monroe	27	2138EST			0	0	?	0	Hall(0.75)	Sioux County, Selfridge	19	2205CST 2208CST			0	0	4		Tstm.	(1.75), Wind G52
	from and blow last	1950 EST power line n over his ed for sev	until 2 es. A p s patrol veral mi	120 ES olice car. nutes.	T. M offic and t Tre	ost of er rep hat wi es wer	f the porter and-di re bl	damage d that riven i	Charlotte area e was to trees a barricade was large hail m at several o reported.	Sioux County;	gus	rain fell	mph o in l	ccurred .	at Sel	fridge	at 2	208CST	. Als ts wer	and wind o, two inch e flooded. (1.50)
Robeson Co. N of Lumberton	29	0900EST	nton co	unty a	e e	g O	3 II W	4	TSTM Winds, Hail(1.75)	5N McIntosh, SD Sioux County,	19	2300CST	•		0	0	0	0	Hail	(1-00)
Montgomery Co. South Anson Co. Ansonville		1515EST 1559EST			0	0	?	?	Hail(1.75) TSTM Winds	8SW Selfridge Emmons County,	19	2330CST			0	0	5	5	Hail	(1.75)
	by h	igh winds	and lar	ge hai	il. S	evera	llar	ge tre	th of Lumberton es were blown omery County.	5SW Strasburg	Ha:	ilstones u t southern	p to Emmo	golfball ns Count	size y.	damage	d str			and through
Rutherford Co. Forest City	and 30	trees were	e knocke	ed down	at A O	o O	ille. 3	0	TSTM Winds	Bowman County, Bowman		0015CST Lfball-size		il dente	0 d vehi	0 icles a	4 ind ot			(1.75) es, and
torest city		bile home s were blo			900 c	ustom	ers v	ere wit	thout power, and	Bowman County,		naged surre	oundi			0	?	?		(1.00)
Edgecombe Co. 2 W	31	1500EST			0	0	4	?	TSTM Winds	McIntosh County,	20	0052CST								
Tarboro Pitt Co. Northern Nash Co. near Spring Hope	31 31	1540EST 1600EST			0	0	3 ?	?	TSTM Winds TSTM Winds	Ashley	Twe	o-inch hai maged crop	l was							(2.00) hail
Alamance Co. South- west Wilkes Co. North	31	1839EST 2130EST			0	0	?	?	TSTM Winds	Hettinger County, 4SE New England	20								Funne	1 Cloud
Wilkesboro					•	•				Hettinger County,	20	0140CST	ī		0	0	6	6	Hail	(1.75)
	from were blow	a storm t blown acr n down alc	olew dow ross the ong Libe	m a la road rty Ro	arge s near pad in	torag: Sprin: Alam:	e bui g Hop ance	lding. e. and County	nen the wind 5 to 10 trees trees were Numerous to buildings in		ve	e hail bro hicles and so damaged	strí	pped tre	e fol:	iage in	the	town o	f Mott	ds, dented . The hail
NC7Att Chaharida	Nort	h Wilkesbo		i aliu i	er e	was si		allaye i		Hettinger County, 5SE Regent	20	0158CST	ľ		0	0	?	?	Hail	(0.75)
NCZALL. Statewide	Hot	humid weat	ther bec	an to	take	its to	6 all o	r nagrio	Heat cultural	Ransom County, Elliot	20	0200CST	î		0	0	4	0	Tstm.	Wind
	acti repo	vities in rted kille	the sta ed by th	ite. F ie hot	iundre weath	ds of er. e	thou speci	sands (	of chickens were the coastal lved little		St of	rong winds f large tr	blev ee bi	down a	30,000	0 gallo	on fer	rtiliz	er tank	, and brok
		fall since								Slope County, Amidon	20				0	0	4	0		(1.75)
										Bowman County, Bowman	20				0	0	?	?		(1.75)
										Grant County, 1S New Leipzig	20				0	0	0	0	Hail	(1.75)
										Hettinger County, Mott	Z0 Te			hail was	0 repo:	0 rted by	? ya Ni			(2.50) erver. The
32 NORTH DAK	OTA	l								Towner County,	ha 20			sive dam	nage to	o crops	s, gai		buildi Tstm.	ings and ca
Richland County, 4S Fairmount		1225CST old-air fu	nnel cl	oud wa	s sigh	nted.			Funnel Cloud	Egeland	St ba	rong winds rns and ot	, com	arm stru	th ve	ry heav	y rai	ins, de	strove	d cattle
Emmons County		Afternoon			0	0	0		Lightning	Adams County,	an-	d damaged	crops		0	0	0	0		(0.75)
	were	destroye		used g	rass f				acres of grassland	Haynes Richland County,	20	0330CST	r		0	۰	c			
Burleigh County, Arena	06	1625CST			0	0	0	0	Hail (0.75)	5SE Hankinson	St	rong winds		ked down		0 e trees	5 s and	? golfba	Hail	. Wind, (1.75) ed hail wa
Wells County, Hurdsfield	10	1330CST							Funnel Cloud	Hettinger County,	20	ported.			0	0	?	?		(1.75)
Kidder County, SNE Tuttle	10 A VC	1400CST	na catti	le. ma	l e etn	0 ick an	0		Lightning	Mott Burleigh County,	21	1320CST	r		0	0	4	4		(1.75)
	ligh	tning whi	le he wa	as wall	king i	lnap	astur	e. A	stantly by companion, who njured. M170.	9S McClusky	1	lfball-siz		il broke	•	-		aged co		,,

PLACE	TIME - LOCAL STAMDARD CENGTH OF PATH (MILES) WIDTH OF PATH (MILES) WIDTH OF PATH (MILES) CHOPER TY PROPER TY CROPS	PLACE	TIME - LOCAL STAMDARD - CROPS -
	TIME - IX STANDARD (MLES) WIDTH OF PUT (MARS) WILLED INJURED ROPERTY CROPS		TIME - LO STANDARD LENGTH OF LENGTH OF MILES) WICH OF PARCES IN JURED PROPERTY CROPS
NORTH	DAKOTA	NORTH	DAKOTA
Sheridan County, Denhoff	21 1339CST 0 0 0 0 Hail (1.75)	Steele County, Finley	21 1830CST 0 0 6 0 Tstm. Wind
Wells County, 4SE Sykeston	21 1400CST 0 0 5 5 Hail (1.75)		Strong winds blew down 80 ft, high towers at Finley, and also blew down power transmission structures throughout the county. Power outages were widespread.
	Golfball-sized hail was reported by an observer for State Weather Modification. The hail damaged cropland throughout	Griggs County,	21 1830CST 0 0 5 0 Tatm. Wind
Foster County,	Southern Wells County.	i	Strong winds damaged cabins and overturned boats at a lake resort.
6SW Carrington	Golfball-sized hail was reported. The hail damaged vehicles and buildings, and damaged cropland throughout Foster County. In	Traill County, Blanchard	21 1830CST 0 0 5 ? Hail (2.50) The hail broke windows in the town of Blanchard.
	addition, lightning strikes damaged satellite dishes and killed cattle.	Griggs County, 5NW Cooperstown	21 1836CST Short 5-15 0 0 0 Tornado (FO)
Foster County, 3SW Carrington	21 1415CST- Short 5-15 0 0 5 ? Tornado (F1) 1420CST	Cass County,	A tornado touched down briefly.  21 1839CST 0 0 6° C Tatm. Wind G60
	A tornado entered a farmyard gate, lifted, then descended on a quonset hut, ripping the door off. The tornado then moved towards	Fargo	21 1839CST 0 0 6° C Tstm. Wind C60 Wind gusts to 69 mph were recorded at the Fargo airport at 1839CST.
	a pole barn, lifted again, then came down on the barn, destroying the roof. Next, the tornado lifted a 2000 gallon cylindrical water tank and sent it rolling 1000 feet away.		The strong winds caused damage mostly in the north side of the city! The power lines were downed and trees toppled into power lines, homes, and vehicles. About 4,000 people were without power. The winds also destroyed barns and outbuildings in an area from rural Fargo and West Fargo, northward up to Harvoot.
Foster County, Carrington	21 1421CST 0 0 4 0 Tstm. Wind G57 Wind gusts to 66 mph occurred in the town of Carrington. The	Griggs County,	21 1845CST 1 100 0 0 5 ? Tornado (F3) to 1850CST
	winds were accompanied by very heavy rains which flooded streets with water up to two feet deep.	4S Aneta	A tornado moved a farmhouse off its foundation and destroyed a barn and garage. The tornado moved to a neighboring farm and destroyed grain bins and barns. A woman was injured when she
Stutsman County, SE Pingree	21 1440CST Funnel Cloud		slipped on steps going into her basement shelter.
Griggs County, 5S Cooperstown	21 1520CST 0 0 ? ? Hail (0.75)  Hail 3/4 of an inch in diameter was reported by an observer for State Weather Modification.	Griggs County, 8N Cooperstown	21 1845CST 0 0 5 0 Tstm. Wind Strong winds uprooted trees and brokeoff power transmission line poles.
Steele County,	21 1602CST 0 0 6 6 Hail (2.00)	Steele County,	21 1845CST Short 5-15 0 0 5 0 Tornado (F0)
Норе	Extensive crop damage occurred throughout Steele County from hail, heavy rains, and high winds. Sixty thousand acres of cropland were destroyed and damage has been estimated at four million dollars.	Finley	A brief tornado touchdown resulted in uprooted trees and damaged buildings. A local lumberyard received considerable damage.
Steele County, 10W Hope	21 1605CST Funnel Cloud	Steele County, 1SW Sharon	21 1855CST Short 5-15 0 0 5 ? Tornado (FO)
Griggs County,	21 1605CST 0 0 6 6 Hail (1.75)		A brief tornado touched down and destroyed three grain storage buildings.
9W Cooperstown	The hail was accompanied by very heavy rains. This combination caused about two million dollars worth of crop damage throughout Griggs County.	Griggs County, 4NE Cooperstown	21 1900CST Short 5-15 0 0 5 ? Tornado (FO)  A brief tornado touched down and destroyed a grain storage building
Cass County,	21 1620CST Short 5-15 0 0 4 0 Tornado (F1)	Traill County, Mayville	21 1915CST 0 0 5 ? Tstm. Wind G57
1W Hunter	A tornedo touched down briefly and ripped grain bins from the ground. One bin bounced and rolled for two and a half miles before stopping in a neighbor's yard.		The strong winds were combined with very heavy rains. This combination flooded Highway 200 east of Mayville and washed cars off the road. Nearby county roads were washed out.
Trail1 County, Clifford	21 1630CST 0 0 6 6 Hail (2.75)	Wells County, 10S Hamburg	21 2010CST 0 0 4 4 Tstm. Wind G52
	Widespread crop damage occurred over Traill County from hail, heavy rains, and high winds. About sixty thousand acres of cropland were destroyed, and damage was estimated at four million dollars.	Wells County, 13E Fessenden	21 2015CST Short 5-15 0 0 0 Tornado (FO) A brief tornado touched down, but no damage was reported.
Traill County,	21 1645CST Short 5-15 0 0 0 Tornado (FO)	Traill County,	21 2130CST 0 0 ? ? Tstm. Wind C52
Blanchard	A tornado touched down briefly.	Traill County,	21 2220CST 0 0 5 ? Tstm. Wind C61
Steele County, 10SE Cooperstown	21 1715CST 0 0 ? ? Hail (1.75)	Trail1 County,	22 0000CST 0 0 5 ? Tstm. Wind G55
Barnes County,	The large hail lasted for 30 minutes. 21 1720CST 0 0 ? Hail (1.75)	Mayville	Hail (1.75) Strong winds uprooted trees, destroyed mobile homes, and stripped billboards throughout the Mayville-Portland area. Golfball-sized
lNW Pillsbury	The hail was accompanied by 1½ inches of rain in 15 minutes.	Cago County	hail damaged surrounding cropland.
Senson County, 3N Warwick	21 1747CST Short 5-15 0 0 4 0 Tornado (F1)	Cass County, Hunter	23 0105CST 0 0 4 0 Tatm. Wind  Strong winds uprooted trees and tore the door off of a storage
Cass County,	A brief tornado touchdown destroyed a barn and knocked down trees.  21 1750CST Short 5-15 0 0 0 0 Tornado (FO)	Golden Valley County,	shed.
3NW Argusville	A tornado touched down briefly.	14SE Golva	Golfball-sized hail damaged strips of cropland in southern
Foster County, McHenry	21 1805CST 0 0 ? ? Tstm. Wind G52	Name of Contract	Golden Valley County.
Steele County, 2SW Colgate	21 1805CST 0 0 ? ? Hail (1.75)	Mercer County, Beulah	31 1850CST 0 0 0 0 Tstm. Wind G70 Wind gusts to 80 mph were reported but damage was minimal.
Nelson County,	21 1830CST Short 5-15 0 0 5 0 Tornado (FO)		
Aneta	A tornado touched down briefly and damaged outbuildings, uprooted trees, and flipped campers. Three and a half inches of rain occurred with this storm.		

			JULY 19
PLACE	TIME - LOCAL STANDARD CHEST MILLEB OF STANDARD CHEST DAWAGE CHARACTER OF STORM ST	PLACE	STANDARD OF PATH (MILES) CHARACTER OF STANDARD CHARACTER OF STANDARD
	OATE TIME - STANDAR - CHENGTH OF WIDTH OF WINDED CROPS CROPS OATE		TIME - I.C. STANDARD LENGTH OF PA (MILES) WIDTH OF PA (TARDS) WOTH OF PA (TARDS) CROPS CROPS CROPS CROPS
33 OHIO	·	— оню	
Ashland, Crawford Marion, Morrow, and Richland Counties	Ol- Late	1 - 1	O 1905 EST O O 4 O Thunderstorm Win rees were downed by a thunderstorm in Struthers.
	Four inches of rain fell on parts of the area in less than 6 hours. The subsequent flooding was aggravated both by hilly topography and the	A	.1 1100 EST 0 0 4 0 Thunderstorm Win A thunderstorm blew over seven utility poles and several trees in the Rockford area.
	fact that some locations in the area had already received up to 2 inches of rain from morning to evening on the lst. The flooding forced evacuation of close to a 1000 people. About 80 fixed buildings and 70 mobile homes were destroyed. Approximately 500 fixed buildings suffered damage.	S	1 After- 0 7 0 0 Lightning noon Seven people sitting under a tree suffered minor njuries when the tree was struck by lightning.
	Several bridges were washed out and many bridges and roads experienced some damage. Many crops in the affected area were wiped out. The worst problems were in Richland County, where 5 people were injured. Between them, the Richland County communities of Shelby and Bellville produced	A	1 1300 EST 0 0 4 0 Thunderstorm Win 1 thunderstorm knocked over trees in Fairfield Township and Middletown.
	nearly 600 evacuees and suffered over 15 million dollars in losses.	1	. 2 2035 EST 0 0 4 0 Thunderstorm Win
OHZOO2-004 Central Lakeshore and Northeast	02 Early 0 0 6 6 Urban and Small Morning Stream Flooding	a	A thunderstorm downed trees east of Greenville and in Gettysburg. 12 2130 FST 0 0 5 0 Thunderstorm Wir
Inland Areas of Ohio	Up to 3 inches of rain fell on the area. The	A	12 2130 EST 0 0 5 0 Thunderstorm Wir A thunderstorm overturned several boats and 20 to 30 trailers near Montezuma.
	subsequent flooding problems were aggravated by the fact that tex teather at the end of June had saturated soils in the area. Major problems with street and basement flooding developed. Flooded flelds caused serious crop damage in some locations.	L	IS 2000 EST 0 0 4 ? Hail (2.0)  arge hail fell on Middletown and adjoining areas to the south. The fall was very extensive, covering the ground in many areas, Damage to lawn and gardens was considerable.
OHZO11 Marion County	02 0300 EST 0 0 5 5 Flood  The Scipto River flooded at Prospect. The river	Ashtabula County 2	25 0800 EST .5 035 0 0 4 0 Tornado (F1) A tornado set down in North Kingsville. One nouse suffered significant structural damage,
	crested at a stage of 14.0 feet (flood stage of 10.0 feet) at 1500 EST on the 4th, causing considerable damage to both residences and crops.	b.	out otherwise damage was minor.
OHZO11 Marion County	02 0400 EST 0 0 2 ? Flood  The Scioto River flooded at LaRue. The river	Ann	25 1520 EST 1.0 100 0 0 4 0 Tornado (F1) A tornado touched down approximately 6 miles northeast of the city of Medina. Damage was relatively minor since the storm struck in a rural area.
	crested at a stage of 12.8 feet (flood stage of 11 feet) at 1800 EST on the 2nd, causing only minor damage.	Summit County 2	25 1540 EST 0 0 4 0 Thunderstorm Wir
OHZOO2 Cuyahoga County	02 1400 EST 0 0 0 0 Flood	M	Macedonia.
	The Cuyahoga River flooded at Independence. The river crested at a stage of 17.8 feet (flood stage 16 feet) at 1900 EST on the 2nd. No damage occurred.	Т.	t5 l605 EST O O 4 O Thunderstorm Win Frees were felled by a thunderstorm in the Fremont Brea.
OHZO11 Wyandot County	03 0600 EST	1	25 1630 EST 0 0 4 0 Thunderstorm Win
myunuot county	The Sandusky River flooded at Upper Sandusky. The river crested at a stage of 14.8 feet (flood	c	A thunderstorm downed trees throughout the county. 25 1728 EST 0 0 4 0 Thunderstorm Wir
	stage 13 feet) at 1500 EST on the 3rd, causing some damage to low-lying crops and homes.		A thunderstorm felled several trees and toppled a crane in Oxford.
OHZOO6 Pickaway County	03 0800 EST 0 0 2 ? Flood .	1 1	26 1730 EST 0 0 4 0 Thunderstorm Win A thunderstorm blew over trees east of Eaton.
	The Scioto River flooded at Circleville. The river crested at a stage of 16.4 feet (flood stage 14.0 feet) at 1300 EST on the 4th. Damage was fairly minor.	Butler County 2	26 1753 EST 0 0 4 0 Thunderstorm Win A thunderstorm blew down trees and power lines
Defiance County	05 1615 EST 1.3 60 0 0 4 0 Tornado (FO)		nt several locations in the county. 26 1805 EST 0 0 4 0 Thunderstorm Win
	A tornado struck about 1 mile west of Ney. Numerous trees and several buildings were damaged, but the storm was evidently not powerful enough to cause serious destruction.	A	t thunderstorm felled trees at several locations and also overturned a car in Miamitown.
Defiance County	05 2000 EST 0 0 4 0 Thunderstorm Wind		26 1805 EST 0 0 4 0 Thunderstorm Win A thunderstorm downed trees at several locations,
Hamilton County	A thunderstorm downed trees north of Defiance.  06 1700 EST 0 0 4 0 Hafl (1.75)		26 1814 EST 0 0 4 0 Thunderstorm Wir
	A thunderstorm dropped large hail on Kenwood.	. A	A thunderstorm felled trees at numerous locations in the county.
Trumbull County	10 1715 EST 0 0 4 0 Thunderstorm Wind A thunderstorm blew down trees in Bristol.	1	31 1620 EST 0 0 4 0 Thunderstorm Win A thunderstorm blew down trees in Berkey.
Trumbull County	10 1747 EST 0 0 4 0 Thunderstorm Wind A thunderstorm felled trees in the Johnston area.	Fulton County 3	B1 1630 EST 0 0 4 0 Thunderstorm Win
	y sounders come refred crees in the commston area.	A	A thunderstorm toppled some trees in Seward.

İ	1 1	TIME - LOCAL STANDARD	Ξ	_	NO. 0		ESTIMATED†		CHARACTER			OCAL	Ξ	[		. OF	ESTIMA			
PLACE	DATE		PATH	¥ (	PERSO	XNS							РАТН	¥TH (	PER	SONS	DAMAGE		١,	CHARACTER
			LENGTH OF I	WIDTH OF PATH (YARDS)	KILLED	INJURED	PROPERTY	CROPS	OF STOOM	PLACE	DATE	TIME - LOCAL STANDARD	LENGTH OF (MILES)	WIDTH OF PATH (YARDS)	KILLED	INJURED	PROPERTY	CROPS		OF STORM
34 OKLAHOMA	,									OKLAHO	MA									
Major County,	02	0245CST			0	0	?	?	TSTM Wind	Rogers County,	04	0945CST			0	0	4	?	TSTM	W1nd
4 S Ames Washita County,	02	0255CST				0	4	?	TSTM Wind	4 S Inola Rogers County,	04	1000CST			0	0	4	?	TSTM	Wind
Cordell Garfield County,	02	0307CST			0 .	0	. ?	?	TSTM Wind (52)	Catoosa										
Waukomis Garfield County,	02	0315CST			0	0	?	?	TSTM Wind	·		y morning eter size								nch nd strong
Drummond Kingfisher County,	02	0320CST			•	0	?	,	Hail (0.75)		winds	across r	orthe	n, cen	tral :	and no	rtheas	stern	areas.	Many
Dover	02	0345CST			•	0	:				rece	ived. In one land	Still	ater,	sever	al mob	ile ho	omes w	rere tu	rned
Garfield County, 2 W Fairmont	ļ				•	-		٠	Hail (0.88)		and e	aused roo of Perry	f dame	ge to	many 1	homes	and bu	sines	ges.	The east
Canadian County, W Yukon	02	0350CST			•	0	4	?	TSTM Wind		stro	ng winds a	lso.	Strong	wind	s over	turned	two	parked	
Oklahoma County, NW Oklahoma City	02	0421CST				0	?		Hail (0.88)		of I	nola. Hea	ıvy raj	ln also	occu	rred w	rith th	ne sto	rms ac	mes south
Garfield County, Woodring Airport	02	0430CST			0	0	?	?	TSTM Wind (62)		many	campers v	nho wer							disrupted blown
Pawnee County, Pawnee Airport	02	0430CST			0	0	?	?	TSTM Wind (52)		over	in many a	reas.							
Oklahoma County, Nichols Hills	02	0445CST			0	0	?	?	TSTM Wind	Commanche County,	06	1600CST			1	0	0	0	Extre	me Heat
Oklahoma County,	02	0445CST			0	0	?	?	Hail (0.75)	Lawton										
N Oklahoma City Garfield County,	02	0500CST			0	0	?	?	Hail (0.88)		tempe	year-old	nd hig	h humi	dity.	Doct	a peri ors st	od of	high hat he	expired
2 W Fairmont Grady County,	02	0538CST			0	1	?	? '	TSTM Wind (60)	l I	from	heat exha	ustion	. Hea	t M10	0.				-
Minco Canadian County,	02	0600CST			0	0.	?	?	Hail (0.75)	Garfield County,	08	1615CST			0	0	?	?	Heil	(1.50)
Piedmont Oklahoma County,	02	0615CST			0	0	?	?	TSTM Wind	3 NNW Drummond Major County,	08	1647CST			0	0	?	,		(1.00)
SW Oklahoma City Canadian County,	02	0620CST			0	0	?	?	TSTM Wind	4 S Ringwood Garfield County,		1702CST			0	0	?	,		(1.00)
l S Union City Stephens County,	02	0625CST			0	0	4	?	TSTM Wind	Enid - Vance AFB	1					-		,		
Duncan Oklahoma County,	02	0630CST			0	0	?	?	Flash Flooding	Garfield County, Waukomis	08	1705CST			0	0	?	7		(1.50)
Nrn. Oklahoma City Garvin County,	02	0630CST			-	0		,	TSTM Wind	Garfield County, Bison	1	1715CST			0	0	?	?		(1.00)
Pauls Valley	1				-	-		٠		Major County, 1 S Ringwood	08	1725CST			0	0	?	?	Hail	(0.88)
Murray County, . Joy	02	0715CST			0 1	0	?	?	TSTM Wind	Garfield County, Bison	08	1740CST			0	0	?	?	Hail	(1.25)
Carter County, Gene Autry	02	0730CST			0	0	?	?	Hail (0.75)	Kingfisher County, 3 N Hennessey	80	1745CST			0	0	?	?	Hail	(0.75)
Murray County, Sulpher	02	0730CST			0	0	5		TSTM Wind, Lightning	Major County, 6 SE Ames	Ó8	1837CST			0	0	?	?	Hail	(1.00)
	Thun	deretorms	produce	d wind	s un t	0 70 1	mnh ar		il up to the	Garfield County,	08	1837CST			0	0	?	?	Hail	(1.00)
	вizе	of mickel	s acros	s port:	ions of	f west	tern a	ınd ce	entral areas. Ing home were	Major County,	08	1920CST			0	0	?	?	Hail	(1.75)
	blow	n down. P	arts of	roofs	were t	taken	off o	fac	thurch and a ed in Minco and	7 SW Orienta Major County, 1 SE Bado	08	2020CST			0	0	?	?	Ra11	(1.00)
	a work winded Dunced down of the	man receive ows blown and Many and minor , and mino	ed minor out, and reports or roof o	r inju d seven of tre damage al seco	ries. ral out ees up: were t	A mod tbuild rooted report Heav	bile h dings d, pow ted ac	destr destr er po ross	was overturned,	Alfalfa County,	Slow-moving thunderstorms produced hail up to pingpong ball size and rainfall of 2 to 4 inches across morth-central sections. Some minor flooding occurred in low-lying areas.									
Garvin County,	Į.			th okt							12	1515CST			0	o`	?	7	Hail	
	03	1525CST			0 (	0	?	?	TSTM Wind (52)	ll W Wakita	12	1515CST 1530CST		•	0.	o o		?		
		1525CST 1535CST				0	?		·	11 W Wakita Major County, 10 NE Fairview	12	1530CST			0	0	?	?	Hail	(0.88)
3 E Wynnewood Pontotoc County, 8 W Ada	03	1535CST			0 (		?	?	Hail (0.75)	11 W Wakita Major County, 10 NE Fairview Grant County, 9 W Wakita	12	1530CST 1530CST			0	0	?	?	Hail Hail	(0.88)
3 E Wynnewood Pontotoc County, 8 W Ada Pontotoc County,	03				0 (	0	?	?	·	11 W Wakita Major County, 10 NE Fairview Grant County, 9 W Wakita Major County, 1 S Gedar Springs	12 12 12	1530CST 1530CST 1550CST			0 0	0 0 0	?	? ?	Hail Hail Hail	(0.88) (0.88) (0.88)
3 E Wynnewood Pontotoc County, 8 W Ada Pontotoc County,	03 03 Thunc	1535CST 1538CST derstorms		d winds	0 ( 0 ( sup to	0 0 0 65 1	? ? mph an	? ? id hai	Hail (0.75) TSTM Wind (55)	11 W Wakita Major County, 10 NE Fairview Grant County, 9 W Wakita Major County, 1 S Cedar Springs Alfalfa County, Goltry	12 12 12 12	1530CST 1530CST 1550CST 1600CST			0 0	0 0 0	? ? ?	? ? ?	Hail Hail Hail	(0.88) (0.88) (0.88) (0.75)
3 E Wynnewood Pontotoc County, 8 W Ada Pontotoc County,	03 03 Thunc	1535CST 1538CST		d winds	0 ( 0 ( sup to	0 0 0 65 1	? ? mph an	? ? id hai	Hail (0.75) TSTM Wind (55)	11 W Wakita Major County, 10 NE Fairview Grant Councy, 9 W Wakita Major County, 1 S Cedar Springs Alfalfa County, Goltry Grant County, 5 WSN Wakita	12 12 12 12 12	1530CST 1530CST 1550CST 1600CST			0 0 0 0 0	0 0 0 0 0	? ? ?	? ?	Hail Hail Hail Hail	(0.88) (0.88) (0.88) (0.75) (0.75)
3 E Wynnewood Pontotoc County, 8 W Ada Pontotoc County, 10 NW Ada  Blaine County,	03 03 Thund inch	1535CST 1538CST derstorms		d winds	0 ( 0 ( sup to	0 0 0 65 1	? ? mph an	? ? ad hai	Hail (0.75) TSTM Wind (55)	11 W Wakita Major County, 10 NE Fairview Grant County, 9 W Wakita Major County, 1 S Cedar Springs Alfalfa County, Goltry Grant County,	12 12 12 12	1530CST 1530CST 1550CST 1600CST			0 0	0 0 0	? ? ?	? ? ?	Hail Hail Hail Hail	(0.88) (0.88) (0.88) (0.75)
3 E Wynnewood Pontotoc County, 8 W Ada Pontotoc County, 10 NW Ada Blaine County, 5 N Geary Canadian County,	03 03 Thund inch	1535CST 1538CST derstorms across a		d winds	0 ( 0 ( s up to south	0 0 0 65 1	? ? mph an ral se	? ? ed hai	Hail (0.75) TSTM Wind (55) il up to 3/4	11 W Wakita Major County, 10 NE Fairview Grant County, 9 W Wakita Major County, 1 S Cedar Springs Alfalfa County, Goltry Grant County, 5 WSN Wakita Blaine County,	12 12 12 12 12	1530CST 1530CST 1550CST 1600CST			0 0 0 0 0	0 0 0 0 0	? ? ? ?	? ? ?	Hail Hail Hail Hail Hail	(0.88) (0.88) (0.88) (0.75) (0.75)
3 E Wynnewood Pontotoc County, 8 W Ada Pontotoc County, 10 NW Ada Blaine County, 5 N Geary Canadian County, 8 NW Calumet Grant County,	03 03 Thund inch 04	1535CST 1538CST derstorms across a s		d winds	0 ( 0 ( sup to south 0 (	0 0 0 65 m centr	? ? mph and ral sec	?  d hai ction ?	Hail (0.75) TSTM Wind (55) il up to 3/4 is. Hail (1.75)	11 W Wakita Major County, 10 NE Fairview Grant Councy, 9 W Wakita Major County, 1 S Cedar Springs Alfalfa County, Goltry Grant County, 5 WSN Wakita Blaine County, 3 W Canton Custer County, 3 S Aledo Custer County,	12 12 12 12 12 12	1530CST 1530CST 1550CST 1600CST 1600CST			0 0 0 0 0	0 0 0 0 0 0	? ? ? ? ?	? ? ? ? ?	Hail Hail Hail Hail Hail	(0.88) (0.88) (0.88) (0.75) (0.75) (0.75)
3 E Wynnewood Pontotoc County, 8 W Ada Pontotoc County, 10 NW Ada  Blaine County, 5 N Geary Canadian County, 8 NW Calumet Grant County, Medford	03 03 Thund inch 04 04	1535CST 1538CST derstorms across a 0005CST		d winds	0 ( 0 ( sup tc south 0 ( 0 (	0 65 m centr	? ? mph and see	? d hai ction ? ?	Hail (0.75) TSTM Wind (55) Ll up to 3/4 Hail (1.75) Hail (2.50) Hail (1.00)	11 W Wakita Major County, 10 NE Fairview Grant Councy, 9 W Wakita Major County, 1 S Cedar Springs Alfalfa County, Goltry Grant County, 5 WSW Wakita Blaine County, 3 W Canton Custer County, 3 S Aledo Custer County, 3 S Aledo Crant County,	12 12 12 12 12 12 12	1530CST 1530CST 1550CST 1600CST 1600CST 1600CST 1605CST			0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	? ? ? ? ? ? ?	? ? ? ? ?	Hail Hail Hail Hail Hail Hail TSTM	(0.88) (0.88) (0.88) (0.75) (0.75) (0.75)
3 E Wynnewood Pontotoc County, 8 W Ada Pontotoc County, 10 NW Ada Blaine County, 5 N Geary Canadian County, 8 NW Calumet Grant County, Medford Grant County, 1 S Jeffereon	03 03 Thund 1nch 04 04 04	1535CST 1538CST 1538CST 1618CST 2005CST 2005CST 2005CST 2025CST 2220CST		d winds	0 ( 0 ( s up to south 0 ( 0 ( 0 (	0 0 0 0 65 m cents 0 0 0	? ? mph an ral se 4 4 ?	? ? d hai ction ? ? ?	Hail (0.75) TSTM Wind (55) il up to 3/4 Hail (1.75) Hail (2.50) Hail (1.00) Hail (1.25)	11 W Wakita Major County, 10 NE Fairview Grant County, 9 W Wakita Major County, 1 S Cedar Springs Alfalfa County, Goltry Grant County, 5 WSW Wakita Blaine County, 3 W Canton Custer County, 3 S Aledo Custer County, 3 S Aledo Grant County, 15 S & 2 W Wakita Blaine County,	12 12 12 12 12 12 12 12 12	1530CST 1530CST 1550CST 1600CST 1600CST 1600CST 1605CST			0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	? ? ? ? ? ? ? ? ? ? ? ? ? ? ? ? ? ? ? ?	? ? ? ? ? ?	Hail Hail Hail Hail Hail TSTM	(0.88) (0.88) (0.88) (0.75) (0.75) (0.75) (0.75)
3 E Wynnewood Pontotoc County, 8 W Ada Pontotoc County, 10 NW Ada  Blaine County, 5 N Geary Canadian County, 8 NW Galumet Grant County, Medford Grent County, 1 S Jefferson Garfield County, Garber	03 03 Thund inch 04 04 04 04	1535CST 1538CST 1538CST 16000000000000000000000000000000000000		d winds	0 ( sup to south 0 ( 0 ( 0 ( 0 ( 0 ( 0 ( 0 ( 0 ( 0 ( 0	0 65 m centr 0 0 0 0 0	? ? mph an ral se 4 4	? ? d hai ction ? ? ?	Hail (0.75) TSTM Wind (55) il up to 3/4 Hail (1.75) Hail (2.50) Hail (1.00) Hail (1.25) Hail (1.00)	11 W Wakita Major County, 10 NE Fairview Grant County, 9 W Wakita Major County, 1 S Cedar Springs Alfalfa County, Goltry Grant County, 5 WSN Wakita Blaine County, 3 W Canton Custer County, 3 S Aledo Custer County, 3 S Aledo Crant County, 15 S 6 2 W Wakita Blaine County, 2 N Canton Custer County, Count	12 12 12 12 12 12 12 12 12 12 12 12 12	1530CST 1530CST 1550CST 1600CST 1600CST 1600CST 1605CST 1605CST 1620CST			0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	? ? ? ? ? ? ? 4	? ? ? ? ? ? ? ? ? ? ? ? ? ? ? ? ? ? ? ?	Hail Hail Hail Hail Hail Hail Hail Hail	(0.88) (0.88) (0.88) (0.75) (0.75) (0.75) (0.75) Wind (52)
3 E Wynnewood Pontotoc County, 8 W Ada Pontotoc County, 10 NW Ada  Blaine County, 5 N Geary Canadian County, 8 NW Calumet Grant County, Mcdford Grant County, 1 S Jeffereon Gantield County, Garber Grant County, Pond Creek	03 03 Thund inch 04 04 04 04 04	1535CST 1538CST 1538CST 1600CSST 0005CST 0025CST 0025CST 0220CST 0230CST 0350CST		d winds	0 ( sup tc south	0 0 0 0 65 m cents 0 0 0	? ? mph an ral se 4 4 ? ?	? ? d hai ction ? ? ?	Hail (0.75) TSTM Wind (55) il up to 3/4 Hail (1.75) Hail (2.50) Hail (1.00) Hail (1.25)	11 W Wakita Major County, 10 NE Fairview Grant County, 9 W Wakita Major County, 1 S Cedar Springs Alfalfa County, Goltry Grant County, 5 WSW Wakita Blaine County, 3 W Canton Custer County, 3 S Aledo Custer County, 3 S Aledo Crant County, 1 S S 4 2 W Wakita Blaine County, 2 N Canton Custer County, 4 S Putnam Blaine County,	12 12 12 12 12 12 12 12 12 12 12 12 12	1530CST 1530CST 1550CST 1600CST 1600CST 1600CST 1605CST 1605CST 1620CST 1630CST				0 0 0 0 0 0 0 0 0 0 0 0 0	? ? ? ? ? ? ? 4 ? ?	? ? ? ? ? ? ? ? ? ? ? ? ? ? ? ? ? ? ? ?	Hail Hail Hail Hail Hail Hail Hail Hail	(0.88) (0.88) (0.88) (0.75) (0.75) (0.75) (0.75) Wind (52) Wind (61) (1.75)
3 E Wynnewood Pontotoc County, 8 W Ada Pontotoc County, 10 NW Ada  Blaine County, 5 N Geary Canadian County, 8 NW Calumet Grant County, Medford Grent County, 1 S Jefferson Garffeld County, Garber Grant County, Garber	03 03 Thund inch 04 04 04 04 04	1535CST 1538CST 1538CST 3ereson a 20005CST 0025CST 0151CST 0220CST 0230CST 0350CST 0415CST		d winds	0 ( sup to south  0 ( 0 ( 0 ( 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	? ? mph an ral se 4 ? ? ?	?	Hail (0.75) TSTM Wind (55)  Il up to 3/4  Is.  Hail (1.75)  Hail (2.50)  Hail (1.00)  Hail (1.25)  Hail (1.00)  Hail (0.88)  TSTM Wind	11 W Wakita Major County, 10 NE Fairview Grant Councy, 9 W Wakita Major County, 1 S Cedar Springs Alfalfa County, Goltry Grant County, 3 W Canton Custer County, 3 S Aledo Custer County, 3 S Aledo Crant County, 15 S 6 2 W Wakita Blaine County, 2 N Canton Custer County, 4 S Putnam Blaine County, 4 N Canton Custer County, 5 N Canton Custer County, 6 N Canton Custer County, 7 N Canton Custer County, 8 N Canton Custer County, 9 N Canton Major County, 9 N Canton	12 12 12 12 12 12 12 12 12 12 12 12 12 1	1530CST 1530CST 1550CST 1600CST 1600CST 1600CST 1605CST 1605CST 1620CST 1630CST 1645CST			0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	? ? ? ? ? ? 4 ? ? ?	? ? ? ? ? ? ? ? ? ? ? ? ? ? ? ? ? ? ? ?	Hail Hail Hail Hail Hail Hail Hail Hail	(0.88) (0.88) (0.88) (0.75) (0.75) (0.75) (0.75) Wind (52) Wind (61) (1.75) (0.75)
3 E Wynnewood Pontotoc County, 8 W Ada Pontotoc County, 10 NW Ada  Blaine County, 5 N Geary Canaddan County, 8 NW Calumet Grant County, Medford Crent County, 1 S Jefferson Garfield County, Garber Grant County, Pond Creek Garfield County, Garber Garfield County, Carber Carfield County, Carber Carfield County, Carber Carfield County, Covington	03 03 Thunch 04 04 04 04 04 04 04	1535CST 1538CST 1538CST 1612CST 0005CST 0025CST 0151CST 0220CST 0230CST 0435CST 045CST		d winds	0 ( se up tr. south	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	? ? ? ?	? ? dd hai ? ? ? ? ? ?	Hail (0.75) TSTN Wind (55) il up to 3/4 ss. Hail (1.75) Hail (2.50) Hail (1.00) Hail (1.25) Hail (1.00) Hail (1.00) Hail (0.88) TSTM Wind Hail (0.75)	11 W Wakita Major County, 10 NE Fairview Grant Councy, 9 W Wakita Major County, 1 S Cedar Springs Alfalfa County, Goltry Grant County, 3 W Canton Custer County, 3 S Aledo Custer County, 3 S Aledo Crant County, 15 S 6 2 W Wakita Blaine County, 2 N Canton Custer County, 4 S Putnam Blaine County, 4 S Putnam Blaine County, 3 S Cedar Springs Blaine County,	12 12 12 12 12 12 12 12 12 12 12	1530CST 1530CST 1550CST 1600CST 1600CST 1600CST 1605CST 1620CST 1630CST 1645CST 1650CST			0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	? ? ? ? ? ? ? 4 ?	? ? ? ? ? ? ? ? ? ? ? ? ? ? ? ? ? ? ? ?	Hail Hail Hail Hail Hail Hail Hail Hail	(0.88) (0.88) (0.88) (0.75) (0.75) (0.75) (0.75) Wind (52) Wind (61) (1.75) (0.75)
3 E Wynnewood Pontotoc County, 8 W Ada Pontotoc County, 10 NW Ade  Blaine County, 5 N Geary Canadian County, 8 NW Calumet Grant County, Madford Grant County, Garber Grant County, Garber Grant County, Garber Grant County, Carden Grant County, Carden Grant County, Carber Grant County, County Count	03 03 Thund inch 04 04 04 04 04 04 04 04	1535CST 1538CST 1538CST 0005CST 0025CST 0151CST 0220CST 0230CST 0450CST 0450CST 0500CST		d winds	0 ( 0 ( 0 ( 0 ( 0 ( 0 ( 0 ( 0 ( 0 ( 0 (	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	? ? ?	? ? dd hailottion ? ? ? ? ? ? ? ? ? ? ? ? ? ?	Hail (0.75) TSTM Wind (55) Il up to 3/4 ss. Hail (1.75) Hail (2.50) Hail (1.00) Hail (1.25) Hail (1.00) Hail (0.88) TSTM Wind Hail (0.75) TSTM Wind (56)	11 W Wakita Major County, 10 NE Fairview Grant County, 9 W Wakita Major County, 1 S Cedar Springs Alfalfa County, Goltry Grant County, 5 WSN Wakita Blaine County, 3 W Canton Custer County, 3 S Aledo Custer County, 15 S 6 2 W Wakita Blaine County, 2 N Canton Custer County, 2 N Canton Custer County, 3 S Aledo Crant County, 15 S 6 2 W Wakita Blaine County, 2 N Canton Custer County, 4 S Putnam Blaine County, 4 S Putnam Blaine County, 5 N Canton Major County, 3 S Cedar Springs	12 12 12 12 12 12 12 12 12 12 12 12 12 1	1530CST 1530CST 1550CST 1600CST 1600CST 1600CST 1605CST 1605CST 1620CST 1630CST 1645CST 1650CST 1700CST			0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		? ? ? ? ? ? 4 ? ? ? ? ? ? ? ? ? ? ? ? ?	? ? ? ? ? ? ? ? ? ? ? ? ? ? ? ? ? ? ? ?	Hail Hail Hail Hail Hail Hail Hail Hail	(0.88) (0.88) (0.88) (0.75) (0.75) (0.75) (0.75) Wind (52) Wind (61) (1.75) (0.75) (0.88)
3 E Wynnewood Pontotoc County, 8 W Ada Pontotoc County, 10 NW Ada  Blaine County, 5 N Geary Canadian County, 8 NW Calumet Grant County, Medford Grant County, 1 S Jefferson Garfield County, Garber Garnt County, Pond Creek Garfield County, Garber Garfield County, Garber Garfield County, Ferry Payme County, Perry Payme County, Stillwater	03 03 Thundinch 04 04 04 04 04 04 04 04	1535CST 1538CST 1538CST 1538CST 0005CST 0025CST 0151CST 0220CST 0230CST 0415CST 0450CST 0500CST 0500CST		d winds	0 ( 0 ( 0 ( 0 ( 0 ( 0 ( 0 ( 0 ( 0 ( 0 (	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	? ? ? 4 4 7 ? ? ? ? 4 5 5	?	Hail (0.75) TSTM Wind (55) Il up to 3/4 Is. Hail (1.75) Hail (2.50) Hail (1.00) Hail (1.25) Hail (1.00) Hail (0.88) TSTM Wind Hail (0.75) TSTM Wind (63)	11 W Wakita Major County, 10 NE Fairview Grant Councy, 9 W Wakita Major County, 1 S Cedar Springs Alfalfa County, Goltry Grant County, 5 WSN Wakita Blaine County, 3 W Canton Custer County, 3 S Aledo Custer County, 1 S S Aledo Crant County, 2 S Aledo Crant County, 4 S Putnam Blaine County, 4 S Putnam Blaine County, 3 S Cedar Springs Blaine County, 3 S Cedar Springs Blaine County, 3 N Canton Blaine County, 4 S Canton	12 12 12 12 12 12 12 12 12 12 12 12 12 1	1530CST 1530CST 1550CST 1600CST 1600CST 1605CST 1605CST 1620CST 1630CST 1645CST 1650CST 1700CST 1700CST			0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		? ? ? ? ? ? 4 ? ?	? ? ? ? ? ? ? ? ? ? ? ? ? ? ? ? ? ? ? ?	Hail Hail Hail Hail Hail Hail Hail Hail	(0.88) (0.88) (0.75) (0.75) (0.75) (0.75) Wind (52) Wind (61) (1.75) (0.75) (0.88) (0.88) Wind (61) (0.75)
3 E Wynnewood Pontotoc County, 8 W Ada Pontotoc County, 10 NW Ada  Blaine County, 5 N Geary Canadian County, 8 NW Calumet Grant County, Medford Grant County, 1 S Jefferson Garffeld County, Garber Grant County, Garber Grant County, Ford Creek Garfield County, Carber Carfield County, Carber Carfield County, Ferry Pond Creek Carfield County, Ferry Perry Perry Payne County, Perry	03 03 Thund inch 04 04 04 04 04 04 04 04	1535CST 1538CST 1538CST 0005CST 0025CST 0151CST 0220CST 0230CST 0450CST 0450CST 0500CST		d winds	0 ( 0 ( 0 ( 0 ( 0 ( 0 ( 0 ( 0 ( 0 ( 0 (	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	? ? ?	? ? dd hailottion ? ? ? ? ? ? ? ? ? ? ? ? ? ?	Hail (0.75) TSTM Wind (55) Il up to 3/4 ss. Hail (1.75) Hail (2.50) Hail (1.00) Hail (1.25) Hail (1.00) Hail (0.88) TSTM Wind Hail (0.75) TSTM Wind (56)	11 W Wakita Major County, 10 NE Fairview Grant County, 9 W Wakita Major County, 1 S Cedar Springs Alfalfa County, Goltry Grant County, 5 WSW Wakita Blaine County, 3 W Canton Custer County, 3 S Aledo Crant County, 1 S S Aledo Crant County, 2 S Aledo Crant County, 2 N Canton Custer County, 3 S Aledo Crant County, 4 S Putnam Blaine County, 3 N Canton Major County, 3 S Cedar Springs Blaine County, 3 N Canton Blaine County, 4 E Canton Dewey County, 2 S Taloga	12 12 12 12 12 12 12 12 12 12 12 12 12 1	1530CST 1530CST 1550CST 1600CST 1600CST 1605CST 1605CST 1605CST 1620CST 1630CST 1645CST 1700CST 1700CST 1700CST 1700CST			0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		? ? ? ? ? ? 4 ? ? ? 4 ? ? ? ?	? ? ? ? ? ? ? ? ? ? ? ? ? ? ? ? ? ? ? ?	Hail Hail Hail Hail Hail Hail Hail Hail	(0.88) (0.88) (0.88) (0.75) (0.75) (0.75) (0.75) Wind (52) Wind (61) (1.75) (0.88) (0.88) Wind (61) (0.75) (0.75)
3 E Wynnewood Pontotoc County, 8 W Ada Pontotoc County, 10 NW Ada  Blaine County, 5 N Geary Canadian County, 8 NW Calumet Grant County, Medford Grant County, Garber Grant County, Garber Grant County, Carfield County, Garber Carfield County, Fond Creek Carfield County, Sarber Sarber Strillwater Noble County, Perry Payne County, Norison Cheroke County, Morrison	03 03 Thundinch 04 04 04 04 04 04 04 04	1535CST 1538CST 1538CST 1538CST 0005CST 0025CST 0151CST 0220CST 0230CST 0415CST 0450CST 0500CST 0500CST		d winds	0 (	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	? ? ? 4 4 7 ? ? ? ? 4 5 5	?	Hail (0.75) TSTM Wind (55) Il up to 3/4 Is. Hail (1.75) Hail (2.50) Hail (1.00) Hail (1.25) Hail (1.00) Hail (0.88) TSTM Wind Hail (0.75) TSTM Wind (63)	11 W Wakita Major County, 10 NE Fairview Grant County, 9 W Wakita Major County, 1 S Cedar Springs Alfalfa County, Goltry Grant County, 3 W Canton Custer County, 3 S Aledo Conter County, 3 S Aledo Conter County, 1 S S & 2 W Wakita Blaine County, 2 N Canton Custer County, 3 S Aledo Crant County, 3 S Aledo Crant County, 3 S Aledo Conter County, 3 S Aledo Conter County, 3 S Aledo Conter County, 4 S Putnam Blaine County, 5 N Canton Dewey County, 4 E Canton Dewey County, 5 Taloga Roger Mills County, Berlin	12 12 12 12 12 12 12 12 12 12 12 12 12 1	1530CST 1530CST 1550CST 1600CST 1600CST 1605CST 1605CST 1620CST 1630CST 1645CST 1700CST 1700CST 1700CST 1700CST 1710CST					? ? ? ? ? ? 4 . ? ?	? ? ? ? ? ? ? ? ? ? ? ? ? ? ? ? ? ? ? ?	Hail Hail Hail Hail Hail Hail Hail Hail	(0.88) (0.88) (0.88) (0.75) (0.75) (0.75) (0.75) Wind (52) Wind (61) (1.75) (0.88) (0.88) Wind (61) (0.75) (0.88) (0.88)
3 E Wynnewood Pentotoc County, 8 W Ada Pontotoc County, 10 NW Ade  Blaine County, 5 N Geary Canadian County, 8 NW Calumet Grant County, Medford Grant County, Garber Grant County, Fond Creek Garfield County, Garber Grant County, Pond Creek Garfield County, Carber Sarfield County, Fond Creek Farfield County, Forny Payne County, Ferry Payne County, Frry Payne County, Tablequah Crentocounty, Tablequah Crent County,	03 03 Thundinch 04 04 04 04 04 04 04 04	1535CST 1538CST 1538CST  deratorms a cooperation of the cooperation of		d winds	0 ( 0 ( 0 ( 0 ( 0 ( 0 ( 0 ( 0 ( 0 ( 0 (	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	? ? ?	? ? dd hail ction ? ? ? ? ? ? ? ? ?	Hail (0.75) TSTM Wind (55) Il up to 3/4 Hail (1.75) Hail (2.50) Hail (1.00) Hail (1.00) Hail (1.00) Hail (0.88) TSTM Wind Hail (0.75) TSTM Wind (56) TSTM Wind (63) Hail (0.75)	11 W Wakita Major County, 10 NE Fairview Grant County, 9 W Wakita Major County, 1 S Cedar Springs Alfalfa County, Goltry Grant County, 3 W Canton Custer County, 3 S Aledo Custer County, 3 S Aledo Custer County, 2 S Aledo Grant County, 3 S Aledo Custer County, 3 S Aledo Custer County, 3 S Aledo Grant County, 4 S Putnam Blaine County, 4 S Putnam Blaine County, 3 N Canton Major County, 3 N Canton Blaine County, 4 S Putnam Blaine County, 5 N Erick  8 County, 5 Taloga Roger Mills County, Berlin Backham County, 5 N Erick	12 12 12 12 12 12 12 12 12 12 12 12 12 1	1530CST 1530CST 1550CST 1600CST 1600CST 1605CST 1605CST 1620CST 1630CST 1645CST 1700CST 1700CST 1700CST 1710CST 1710CST 1710CST 1710CST					? ? ? ? ? ? 4 ? ? ? ? ? ? ? ? ? ? ? ? ?	? ? ? ? ? ? ? ? ? ? ? ? ? ? ? ? ? ? ? ?	Heil Heil Heil Heil Heil Heil Heil Heil	(0.88) (0.88) (0.88) (0.75) (0.75) (0.75) (0.75) Wind (52) Wind (61) (1.75) (0.88) (0.88) Wind (61) (0.75) (0.88) (0.88)
3 E Wynnewood Pentotoc County, 8 W Ada Pontotoc County, 10 NW Ade  Blaine County, 5 N Geary Canadian County, 8 NN Galumet Grant County, 1 S Jefferson Garfield County, Garber Grant County, Fond Creek Garfield County, Carber Carfield County, Carber Carfield County, Forly Perry Payne County, Stillwater Noble County, Norrison Cherokee County, Tablequah	03 03 Thundinch 04 04 04 04 04 04 04 04 04	1535CST 1538CST 1538CST deretorms 1 deretorms 2 dereto		d winds	0 (	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	? ? ?	? ? dd hail ction ? ? ? ? ? ? ? ? ? ?	Hail (0.75) TSTM Wind (55) Il up to 3/4 Is. Hail (1.75) Hail (2.50) Hail (1.00) Hail (1.25) Hail (1.00) Hail (0.88) TSTM Wind Hail (0.75) TSTM Wind (63) Hail (0.75) TSTM Wind (63)	11 W Wakita Major County, 10 NE Fairview Grant County, 9 W Wakita Major County, 1 S Cedar Springs Alfalfa County, Goltry Grant County, 5 WSW Wakita Blaine County, 3 W Canton Custer County, 3 S Aledo Custer County, 3 S Aledo Crant County, 1 S S 4 2 W Wakita Blaine County, 2 N Canton Custer County, 4 S Putnam Blaine County, 4 S Putnam Blaine County, 7 N Canton Major County, 8 S Cedar Springs Blaine County, 9 N Canton Blaine County, 4 S Canton Dewey County, 5 S Cedar Springs Blaine County, 6 E Canton Dewey County, 7 S Taloga Roger Mills County, 8 Erlin Beckham County, 9 Berlin Beckham County, 9 Berlin Beckham County,	12 12 12 12 12 12 12 12 12 12 12 12 12 1	1530CST 1530CST 1550CST 1600CST 1600CST 1605CST 1605CST 1620CST 1630CST 1645CST 1700CST 1700CST 1700CST 1700CST 1710CST					? ? ? ? ? ? 4 . ? ?	? ? ? ? ? ? ? ? ? ? ? ? ? ? ? ? ? ? ? ?	Heil Heil Heil Heil Heil Heil Heil TSTM Heil Heil Heil Heil Heil Heil Heil Heil	(0.88) (0.88) (0.88) (0.75) (0.75) (0.75) (0.75) Wind (52) Wind (61) (1.75) (0.88) (0.88) Wind (61) (0.75) (0.88) (0.88)

								JULY 1
PLACE	DATE TIME - LOCAL STANDARD	LENGTH OF PATH (MILES) WIDTH OF PATH (YARDS)	KILLED SAOSABA SAOSABA SAOSABA SAOSABA SAOSABA SAOSABA SAOSABA SAOSABA SAOSAB S		ATED*	CHARACTER OF STORM	PLACE	TIME - LOCAL STANDARD D STANDARD
OKLAHO		1,	<del></del>		<u> </u>	اــــــــــــــــــــــــــــــــــــ	OKLAHO	
_						7 (2 75)		
Custer County, Thomas	12 1830CST		0 0	?	?	Hail (0.75)	Tulsa County, Sand Springs	18 0050CST 0 0 ? ? TSTM Wind
Washington County, Bartlesville	12 1830CST		0 0	?	?	TSTM Wind (52)		Thunderstorm winds downed trees and power lines, causing a brief
Washington County, 5 mi. NE Ramona	12 1845CST		0 0	?	?	TSTM Wind		power outage in Sand Springs.
Kay County, Ponca City	12 1920CST		0 1	4	?	Lightning		•
Grady County, Nrm. Pocasset	12 2115CST		0 0	?	?	TSTM Wind (61)		
	size across no greater than 7 north of Canto mobile home wa reported in so winds also des trees, one of	orthern sect on, blocking as also over ome areas, ca stroyed seve which fell of damage, in	ions of the down a doz Highway 5 turned. I using high ral outbut on a house Ponca Cit	e state en two- il for s kainfall water lldings e. Ligh	foot deveral of 2 in low and dontring	inmeter trees just hours. One to 4 inches was areas. Strong whed several struck a house, ho was inside the	35 OREGON ORZ005 Douglas and Jackson Counties	01 1300PST 0 ? 6 ? Lightning High-level thunderstorms formed during the afternoon southwest Oregon. Numerous lightning strikes started several fires in the Umpqua and Rogue River National Forests as well as in state and county lands. The largest of the fires lasted 4 to 5 days.
Texas County,	14 1500CST		0 0	?	. ?	Hail (1.75)	ORZ008	01 1700PST 0 0 ? ? Hail (0.75)
Hough Texas County.	14 1515CST		0 0	?	?	Hail (1.75)	Deschutes and Eastern Crook	Thunderstorms moved off of the Cascades during the
Goodwell	A thunderstors windshields in			lze hail	l that	smashed car	Counties	early evening. Pea to marble size hail was reported along with 1 to 2 inches of rain in the Bend-Prinevil LaPine triangle. Damage was done to wheat fields. N flash flooding was reported.
Jackson County,	17 1415CST		0 0	?	?	Hail (1.75)	Wamic,	21 1700PST 0 0 ? 5 Hail (0.75)
5 SW Altus Kiowa County,	17 1500CST		0 0	?	?	Hail (1.00)	Wasco County (ORZ007)	Thunderstorms moved off of the Cascades during the evening. Three-quarter inch diameter hail and heavy
Snyder Comanche County,	17 1508CST		0 0	. ?	,	TSTM Wind (61)		rain pulverized 500 to 600 acres of wheat and alfalfa
Indiahoma			0 0		. ?	TSTM Wind (61)		
Comanche County, 8 NNE Cache			0 0	1	٠	TSTM Wind		•
Comanche County, 6 W Medicine Park	17 1527CST			,	,			
Kiowa County, Snyder	17 1529CST		0 0	?	·	Hail (1.00)	36 PENNSYLVA	NIA Fastern
Tillman County, 3 S Snyder	17 1530CST	0.1 20	0 0	?	?	Tornado (FO)		·
Comanche County, 7 W Medicine Park	17 1548CST		0 0	?	?	TSTM Wind	Chester County, Spring City	02 1715EST 0 0 3 0 TSTM Wind Thunderstorm wind gusts uprooted several large trees and broke of
Grady County, 5 S Chickasha	17 1615CST		0 0	3	?	TSTM Wind		portions of another. A cast iron stove was moved across a porti and a rain gutter on the same house was blown off and then over
Comanche County, Fletcher	17 1618CST		0 0	?	?	TSTM Wind		neighboring house.
Caddo County, 10 SW Chickasha	17 1630CST		0 0	?	?	Hail (0.75)	Bucks County	02 2000EST
Grady County, 7 SW Chickasha	17 1630CST		0 0	?	?	Hail (1.00)	Í	Heavy rain fell between 6 pm and 9 pm EDT in amounts as high as
McClain County, Dibble	17 1715CST		0 0	,	?	TSTM Wind		5 inches in some locations. Drainage flooding of roadways and other areas followed, as well as flooding of small streams. The
Grady County, Bradley	17 1734CST		0 0	?	?	TSTM Wind (63)		Neshaminy Creek also flooded and was over flood stage at Langhor from 11 pm EDT until 8 am EDT on July 3rd. Homes and businesses
Pottawatomie County,	17 1818CST		0 0	?	?	Hail (0.75)		were flooded, and \$100,000 in damage occurred at one automobile dealership alone. Portions of some roads were washed out. In
Shawnee . McClain County,	17 1900CST		0 0	?	?	TSTM Wind (61)		Yardley the heavy rain caused the Delaware Canal to overflow. Some flooding also occurred along the Pennypack Creek in Montgot
Purcell Cleveland County,	17 1900CST		0 0	?	?	TSTM Wind		and Bucks counties.
Lexington Canadian County,	17 1939CST		0 0	?	?	Hail (1.50)	Lancaster County,	08 1700EST 1 0 0 0 Lightning
Union City Grady County,	17 1946CST		0 0	?	?	Hail (0.88)	2 NE Neffsville	A man was killed by lightning as he was tying down his aircraft at the Lancaster County Airport. The lightning struck the
Pocasset Grady County,	17 2001CST		0 0	?	?	Hail (0.88)		pavement near him, M220
Pocasset Grady County,	17 2020CST		0 0	?	?	Hail (0.75)	Luzerne County,	09 1145EST
Minco Canadian County,	17 2039CST		0 0	?	?	Hail (1.50)	Shavertown	Heavy rains fell between Noon and 3 pm EDT at Shavertown, and
Union City Canadian County,	17 2045CST		0 0	?	?	Hail (1.00)		totaled 4.77 inches. A one-hour total of 3.17 inches fell between 12:45 pm and 01:45 pm EDT. One hundred homes had water
3 W Mustang			0 0	?	?	TSTM Wind (56)		at least in the basement and 10 had water in the first floor. Some roadways were washed out, and guardrails and walls were
Canadian County, 3 W Mustang			0 0	?	?	TSTM Wind (56)		undermined. The total damage was estimated at one million dollar
Canadian County, Yukon	17 2110CST						Northampton County,	09 1430EST 0 0 3 0 Flash Flood
Oklahoma County, NW Oklahoma City Oklahoma County,	17 2150CST 17 2207CST		0 0	?	?	Hail (0.75)	4 E Bethlehem	Heavy rain caused flooding that washed an automobile into a can. There also was considerable roadway and other drainage flooding from Bethlehem eastward to Easton.
Oklahoma City	southwest sec south of Snyde occurred at ma lines. A cem	moved northled and clouds and tions. One er, doing no any location ent truck was blown across the 1 ranging from the context of the context o	theastward of funnel as small torm damage. It is, downing as overturn off of the state and	across clouds r nado tor Winds or trees, ned near road no	the s were r uched f 60 t power r Flet ear La ed a s	tate. Many sceived across down briefly o 70 mph poles and ther and a wton. Wind also tore in	Lycoming County: Picture Rocks Hughesville Linden  Berks County, Reading	11 1745EST 0 0 3 0 TSTM Wind 11 1815EST 0 0 3 3 0 TSTM Wind 11 1945EST 0 0 3 3 0 TSTM Wind 11 1945EST 0 0 3 3 0 TSTM Wind Thunderstorm wind gusts brought down trees and power lines at Picture Rocks and several large trees in Hughesville. Trees and power lines were also downed in Woodward Township near Linden.  12 1330EST 0 2 4 0 Lightning Lightning struck and injured 2 men and also caused a fire that destroyed a garage.

	<del>, , , , , , , , , , , , , , , , , , , </del>		<del></del> ,						<del></del>					-					JULY 198
	OCAL		PATH	¥T.	NO. PERS		ESTIM. DAM	ATED†	CHARACTER.			OCAL	PATH	Ŧ.	NO. PERS		EST IMA DAMA		cu inicasa
PLACE	DATE TIME - LOCAL	STANDARD	LENGTH OF F	WIDTH OF PATH (YARDS)	KILLED	INJURED	PROPERTY	CROPS	CHARACTER OF STORM	PLACE	DATE	TIME - LOCAL STANDARD	LENGTH OF	WIDTH OF PATH (YARDS)	KILLED	INJURED	PROPERTY	CROPS	CHARACTER OF STORM
PENNSY	LVANIA	, Ec	ister	n						PENNSY	'LVA	NIA, E	aste	rn					
Monroe County, Long Pond	12 1400E Dime size		was re	ported	0 at Lo	0 ong Po	?	0	Hail (0.75)	Montgomery County, 5 ESE Pottstown	Ligh							Radi	Lightning Facility, The
Lancaster County, Lancaster	and also a	rm wi	ations	just	south	vest a	ind ea	e city st of	TSIM Wind  of Lancaster the city. Heavy, e roadway flood-	Carbon County, Lansford and Summit H111	26 Hail dama Many	0935EST L of up to age to aut v windows	one a tomobil were a	nd one-l es in th lso brok	0 nalf in ne form	0 nch di n of d house	6 ameter lents a	0 cause nd creother	STM Wind (52), lail (1.50) ed considerable acked windows. buildings. The
Cumberland County: 5 to 10 NW Carlisle 1 N Carlisle New Kingston Wormleysburg	12 1427E 12 1452E 12 1533E Thundersto northwest one mile n	ST ST ST rm wi of Ca orth	erlisle of Car	. The	roof Tree	was b es and	lown powe	0 0 0 own to off of	TSTM Wind TSTM Wind TSTM Wind TSTM Wind • the north and a trailer about s were also	Schuylkill County, Deer Lake	stor tota 26	rm wind gu al storm o	sts al damage	so took was est: ed golfl	portio imated 0 oall si	ons of at \$5 0 ize ha	roofs 000,000 3	off of mo	dail (1.75), CSTM Wind Lake, 7 miles
Dauphin County, 1/2 W Harrisburg	downed aro  12 1445E Thundersto City Islan	ST rm wi	Ind gus	sts bro	0 ought d	1 down a	2	0	TSTM Wind hit a man on	Lehigh County, 1 NE Catasauqua		1028EST	winds	estimate	0 ed at 6	2 50 mph		1	TSTM Wind (52), Hail (1.75), Aightning Tees and broke
Delaware County: 5 W Media Brookhaven	12 1500E	ST ST			0	0	3 ?	0	TSTM Wind Hail (0.75) ing numerous		of A and in o	Allentown. two men v on a golf	. Thre were in	e-quarte jured by	r inch / light	n diem ning	neter h	ail w he sh	of the center as also reported, elter they were
Chester County:		ges t							il was reported	Northampton County, Berlinsville		1028EST	inds a	nd 3/4 t	0 inch di	0 amete	3 er hail		lail (0.75), CSTM Wind reported.
Coatesville New Carden		ST rm wi						0 atesvi	TSTM Wind TSTM Wind lle and power ay flooding in	Bucks County, Riegelsville Berks County,	Thre	1035EST se-quarter siles nort				was r	? eporte	d 1n 1	Hail (0.75) Riegelsville,
York County: Manchester York Newberrytown 2 N Mt. Wolf	in the eas	ST ST ST orm wi	rtion c	of Mano	hester	r, and	l betw	0 0 0 Newbereen Yo	TSIM Wind TSIM Wind TSIM Wind TSIM Wind TSIM Wind TSIM Wind Trytown and York, rk Haven and hout power for a	Boyertown Franklin County, 2 N Waynesboro	26 Thun roof tree	also drop 1230EST derstorm . The ro	wind gu	ckel siz usts dow carried	0 ned tro	0 ees a a hou	4 nd tor se, cl	at bro ? I e off ipped	isil (1.00)  bught down trees,  STM Wind (69)  half of a barn the tops out of le size hail was
Huntington County: Warriors Mark Spruce Creek Mooresville	13 1550F 13 1615F 13 1630F Thundersto at Spruce and three-	ST ST rm w Creel	k. Hai	il of g	golfba:	11 siz	e fel	0 ? ees ar lat k	Hail (1.75) TSTM Wind Hail (0.75)  Id power lines Farriors Mark,	Northumberland County, Sunbury York County, Craley	Thun knoc	ked brick 1335EST	s off o	of the M	unicip:	own tal Bu	ilding 3	A lig	STM Wind htning strike STM Wind 2 inch diameter
Centre County, Tusseyville	13 1645E	ST rm w	ind gus	sts pic	0 ked u	0 pash	3 ned an	0 id cars	TSTM Wind ried it away into aluminum cover	Lancaster County: Safe Harbor Safe Harbor	26 26 A th	1340EST 1345EST	rieport m dropp	ed.	0 0 ball s	0 0 1ze h	3 ? ail an	? T ? H	STM Wind ail (1.75) uced wind gusts
Bastern Pennsylvania	to 26 1800E Temperatur Pennsylvan deaths wer individual	es cl la fo e rep s inv	or 8 co ported, volved people	nsecut 50 of are no	ive da them of avai	ays. in Ph ilable re sow	At le nilade e, exc me cro	most ast 51 lphia. ept the	Heat Wave  of Eastern heat-related Details on the at they were es due to the	Monroe County, Stroudsburg	were tree	e also dow fell on 1400EST	n from the room	Mt. Neb	o to W house 0	akefi and c 0 hail	eld an aused 3 and pr	d Litt some d 0 T E	arbor. Trees le Britain. One amage.  STM Wind, ail (0.75)  winds that roudsburg.
Bucks County, 2 SE Langhorne	down. All broken off straight-1 falling tr house and about two Hail of 3/	loud of i and ine v ees one a city 4 to	the dam some l winds. Falli automob blocks l inch rtions	nage, of large to Numer ing tre vile. wide. of the	consisteres Income also also also also also also also also	ting or being ower laso cau amage d gust as also ughs o	of the uproolines used methodology were so report and the content of Lan	but it tops ted, were dinor d was two e esti	TSTM Wind, Funnel Cloud, Hail (1.00) did not touch of trees being as produced by comed by the amage to one o miles long and mated at 65 mph. The damage path Manor, Hulmevile Township.	36 PENNSYLVA  Crawford County; Cambridge Springs (11 NE Meadville), Conneautville (13 NW Meadville), Linesville (13 Whaadville),	02 Road a br	0600EST	occurr washed eek rar	out at:	ambrido Linesvi deep o	ille,	and w	and Co	Flash Flood nneautville, nom the swollen usville.
Bucks County, 2 NE Quakertown	large amou	g-can wn To nt of and	ownship f hay, 12 cal	a larg	so dest ge amou The lo	troyed unt of oss wa	were stra	airy b dairy w, a l	Lightning arm in equipment, a arge amount of to be in the	and Titusville ( 25 E Meadville) Venango County, Cherry Tree (15 NE Franklin)							3 Cherr		Flash Flood Township due

PLACE	TIME - LOCAL STANDARD LENGTH OF PATH (VARDS) WILLED ROPERTY CROPS	PLACE	TTIME - LOCAL STANDARD LENGTH OF PATH (MILES) WIDTH OF PATH (MARCS) WIDTH OF PATH (MARCS) WOOPERTY CROPS CHARACTER OL STOWN CHARACTER OL STOWN CHARACTER OL STOWN CHARACTER OF STOWN CHA
PENNSY	LVANIA, Western	south c	CAROLINA
Butler County, Summit and Jefferson Townships (4 SE Butler)	02 0600EST 0 0 2 0 Flash Flood Roads were closed in Summit and Jefferson townships.	Barnwell County, Blackville	04 1645EST 0 0 3 0 TSTM Wind Winds blew down trees in Blackville.
Cambria County; Barnesboro and Spangler Townships (24 N Johnstown), and Daleborough (1 E Johnstown)	06 2345EST 0 0 4 0 Flash Flood A dozen families were evacuated from homes in Barnesboro and Spangler townships as Walnut Run and the West Branch of the Susquehanna River and Fox Run rose after 2 to 3 inches of rain fell. Basement flooding occurred in Daleborough.	Greenville County, Moonville  Spartanburg County, Cowpens	0 0 2 0 TSTM Wind Winds damaged the roof of a Moonville store on US Highway 25.  05 2000EST 0 0 2 0 Lightning Lightning caused power outages to 100 customers in Cowpens.
Cambria County, West Taylor (5 N Johnstown)	07 0000EST 0 0 5 0 Lightning A home was set ablaze and subsequently destroyed when struck by lightning.	Dillon County, 2 W Dillon	0 3 4 0 TSTM Wind Thunderstorm winds destroyed one mobile home, damaged another, and caused other minor damage two miles west of Dillon on the east side of SC Highway 9. Three people were slightly injured.
Blair County, Sproul and Claysburg (17 S Altoona)	07 0250EST 0 0 4 0 Flash Flood Water washed over bridges. Flooding of basements and yards occurred as Beaver Dam Creek and the Frankstown Branch of the Juniata River overflowed. Twelve homes were evacuated.	Charleston County, North Charleston	06 1405EST 0 0 4 0 TSTM Wind 06 1415EST 0 0 3 0 Hail (0.50) Winds blew several large trees down and broke plate glass windows in North Charleston.
Butler County, Zelienople (13 SW Butler)	10 2045EST 0 0 0 0 Punnel Cloud A funnel cloud passed near Zelienople.	Allendale County, 7 W Allendale	06 1445EST 0 0 4 0 TSTM Wind Thunderstorm winds blew down trees 7 miles west of Allendale, and also caused minor damage in Allendale.
Crawford County, Townville (14 E Meadville) and Guys Mills (9 E Meadville)	25 1430EST 0 2 0 0 Lightning Two men were struck by lightning, one in Townville and one in Cay's Mills. Neither was injured seriously.	Chesterfield County, 4 S Cheraw	07 1800EST 0 0 3 0 Lightning Lightning killed 2 horses and injured another on the Anderson Farm 4 miles south of Cheraw.
Clarion County, New Bethlehem (14 S Clarion)	25 1715EST 0 0 0 0 Thunderstorm Wind Trees were downed by thunderstorm winds.	Charleston County, Charleston	09 1400EST 0 0 2 0 Hafl (0.50) 09 1400EST 0 0 0 2 0 TSTM Wind Small hail caused minor damage. Also, winds uprooted trees, disrupting electrical service and breaking windows.
Butler County, Zelienople (13 SW Butler)	25 1745EST 0 0 0 0 Thunderstorm Wind Trees were downed by thunderstorm winds.	Lexington County, 2 N Columbia Metropolitan Airport	11 1730EST 0 0 0 2 TSTM Wind Winds blew down several large trees two miles north of the Columbia Metropolitan Airport.
		Clarendon County, Alcolu and Gable Sumter County: Dalzell Sumter	12 1300EST 0 0 3 0 TSTM Wind  12 1300EST 0 0 2 0 Lightning 12 1300EST 0 0 4 0 Lightning Thunderstorm winds damaged trees and utilities in Gable and Alcolu.
37 RHODE ISLA			Lightning damaged utilities at Delzell and Sumter, resulting in \$10,000 damage to a beverage store.
Washington County, Westerly and Ashaway	afternoon  Three persons were injured by a bolt of lightning while standing near a tree. All three complained of numbness and tingling sensations in their arms and legs and were transported to a local hospital.	Orangeburg County: Bowman Bowman Santee Holly Hill	12 1330EST
Washington County, Ashaway	25 1330EST- 0 0 3 0 TSTM Wind (60) 1400EST Thunderstorm winds caused a 50 to 60 foot wide path of		Holly Will. A woman was injured by lightning and hail was reported at Bowman. Winds overturned a mobile home at Santee, injuring 6 people.
-	Inunderstorm winds caused a 30 to 80 1000 wide pact of destruction, mostly to trees, in a small section of town.	Berkeley County, Lake Moultrie	12 1500RST 0 0 4 0 TSTM Wind (40) Thunderstorm winds sank a cabin cruiser on Lake Moultrie in northwest Berkeley County.
		Charleston County: James Island John's Island Charleston Charleston	12
38 SOUTH CAR	DLINA		A large area of thunderstorms moved across Charleston County. A home burned on James Island after being struck by Hightning. A camper trailer was overturned by winds, large trees were downed,
Pickens County, Salem	01 1600EST 0 0 3 0 Lightning Lightning struck the Salem water tower, causing a rupture that spilled 100,000 gallons of water.	Beaufort County:	and small hail was reported west of the Ashley River in Charleston. Winds of up to 60 mph were reported on John's Island.
Richland County, 2 NW Eastover	02 1930EST 0 0 3 0 TSTN Wind  The Elliot Farm 2 miles northwest of Eastover was hit by a severe thunderstorm. Winds tore the roof off of one building, damaged several others, and blew down a few trees.	Hilton Head Island Ladies Island	12 1730EST 0 0 3 3 0 Lightning 12 1730EST 0 0 0 3 0 TSTM Wind Thunderstorm wind toppled trees and power lines, disrupting power along Sams Point Road on Laddes Island. Lightning also struck several homes and damaged computer and telephone equipment on Hilton Head Island.
Horry County, 6 W Myrtle Beach	03 1130EST 0 0 3 0 Lightning Lightning struck the luggage rack of a moving car on Highway 501 near Myrtle Beach. The car's electrical system was heavily damaged. The driver was not injured.	Beaufort County, Hilton Head	12 1830EST 0 0 4 0 Lightning Lightning knocked out telephone service to 8000 customers and caused a blaze at Queen's Grant Villas.
Horry County, Conway	03 1140EST 0 0 3 0 Lightning Lightning struck a substation in Conway, disrupting power to more than 1000 homes.		

			JULY 19
PLACE	DATE  STANDARD  STANDARD  LENGTH OF PATH  (MLES)  WIDTH OF PATH  (MLES)  WIDTH OF PATH  (MLES)  CROPS  CROP	PLACE	DATE  STANDARD  STANDARD  STANDARD  STANDARD  STANDARD  STANDARD  STANDARD  STANDARD  STANDARD  CHARACTER  OL  OL  STORM  CHARACTER
SOUTH C	CAROLINA	—— south c	CAROLINA
Horry County, Socastee	13 1030EST 0 0 4 0 Lightning A lightning-caused fire burned a home in Socastee.	Clarendon County, Manning	27 1545EST 0 0 2 4 Hail (0.50) 27 1545EST 0 0 4 0 TSTM Wind  Thunderstorm winds blew down several trees on Brewington Road northeast of Manning. Hail destroyed several acres of tobacco
Florence County, Florence	13 2000EST 0 0 2 0 TSTM Wind High winds uprooted large trees and damaged several roofs in Florence.	Dillon County,	and the wind damaged several farm buildings.  27 1705EST 1 0 0 0 Lightning
Barnwell County, .2 W Blackville	14 0030EST 0 0 5 0 Lightning Lightning struck a tree about two miles west of Blackville, killing five pedigree cows that were nearby.	Dillon Berkeley County,	Lightning struck and killed a 9-year-old boy riding a bicycle in Dillon.  27 1820EST 0 0 2 0 TSTM Wind
Rorry County, 11 S Conway	15 0930EST 0 0 4 0 TSTM Wind Winds damaged a mobile home, blew down several trees, and cut a path through pine tops near Bucksport about 11 miles south of Conway. The storm caused wind damage over a path that began at the Smart residence near Bucksport and continued 3 miles to the	between Cooper River and Huger Richland County,	27 1820EST 0 0 3 0 Hail (0.75) Winds broke tree limbs and hail fell between Cooper River and Huger.  28 1500EST 0 0 3 0 Lightning
Horry County, North Myrtle Beach	southeast.  15 1030EST 0 0 3 0 TSTM Wind  In North Myrtle Beach, wind blew gravel from the top of the	Columbia Charleston County,	Intense cloud-to-ground lightning caused numerous power outages in Columbia.  28 1545EST 0 0 0 0 TSTM Wind
Horry County, Garden City Beach	Blockade Runner Hotel, damaging 16 cars in the parking lot.  15 1412EST 0 0 4 0 TSTM Wind	Charleston  Beaufort County,  Hilton Head	Thunderstorm winds with gusts of up to 61 mph were reported.  28 1830EST 0 0 4 0 Lightning
Garden City Beach	Thunderstorm winds ripped part of a roof from a vacation home at Garden City Beach. Power lines were downed, and an automobile and small sail boat were damaged.	Chester County,	Lightning set a home afire on Hilton Head Island.  29 1415EST 0 0 4 0 TSTM Wind Trees were blown down in Chester.
Greenville County, Taylor	22 PM 1 0 0 0 Heat  John P. Redman, a 69-year-old male, died of heat exhaustion as he was placing fans in the attic to cool his home in Taylor. The temperature in the attic was in excess of 100°F. M69P	Orangeburg County, between Cope and Cordova	29 1500EST 0 0 5 0 ISTM Wind Winds damaged a mobile home between Cope and Cordova. Also, more than 100 homes had lost power.
Laurens County, Clinton	23 1600EST 0 0 3 0 TSTM Wind 23 1615EST 0 0 2 0 Hail (0.75)  Considerable wind damage and hail occurred during afternoon thunderstorms in Clinton.	Lexington County: Cayce Congaree	29 1530EST 0 0 4 0 TSTM Wind 29 1715EST 0 0 2 0 TSTM Wind Thunderstorm wind blew down several large trees of between 90 and
Cherokee County, Blacksburg	23 1630EST 0 0 5 0 Lightning 23 1630EST 0 0 4 0 TSTM Wind Thunderstorm winds downed trees in Blacksburg. Several houses were hit by lightning, and power to 3000 customers was disrupted.		100 feet in height in the Parkland area of Cayce. The diameter of the largest trees was about 4 feet. Extensive damage occurred to utilities in Cayce and West Columbia. Wind damage was also done to trees and a shed in South Congaree.
Cherokee County, Mount Paren	23 1645EST 0 0 4 0 TSTM Wind Thunderstorm winds damaged four barns near Mount Faren in northern Cherokee County.	Richland County: Columbia Columbia 16 N Columbia	29 1545EST 0 0 3 0 TSTM Wind 29 1545EST 0 0 3 0 Hail (1.75) 29 1615EST 0 0 3 3 TSTM Wind In Columbia, hail of up to 1.75 inches in diameter damaged cars
Newberry County, Newberry	24 1650EST 0 0 5 0 Lightning A lightning-set fire destroyed a home in Newberry.		and roofs, and thunderstorm winds blew down several trees on power lines and cars. Flags on State House were blown down as well. Wind also blew down trees and damaged roofs between Blythwood and SC Highway 34.
Laurens County, Gray Court	25 1735EST 0 0 3 2 Hail (0.75)	Greenville County, Tigerville	30 2005EST 0 0 2 0 TSTM Wind Trees were downed in Tigerville,
Spartanburg County, Inman	25 1800EST 0 0 3 0 Lightning 25 1800EST 0 0 4 0 TSTM Wind  Thunderstorm winds damaged the roof and blew the porch off of a gift shop in Imman. Also, a home on Windmill Road was set aftre by lightning.	Spartanburg County, Lyman and Inman	30 , 2010EST 0 0 2 0 ISTM Wind Trees were downed in Lyman and Inman.
Pickens County, Easley	25 1845EST 0 0 5 0 TSTM Wind 25 1929EST 0 0 4 2 Hail (1.75) Wind and hail was reported in Easley and one mile southeast of Easley. Winds blew down many large trees, crushed roofs of several homes, and disrupted electrical service.		
Pickens County, Six Miles	25 1939EST 0 0 3 0 TSTM Wind Wind damage was reported in Six Miles.	39 SOUTH DAK	DTA  81 1838 CST
Williamsburg County, Hemingway	27 1512EST 0 0 4 5 Hail (0.75) 27 1512EST 0 0 3 3 TSTM Wind Winds blew several large trees down, destroyed a barn, and flatten- ed several acres of corn near Hemingway.	Mitchell  Hutchinson Co.,  4NW Menno	Ø4 1430 CST Ø Ø Ø Ø Heavy Rain
Marion County, Marion	27 1525EST . 0 0 3 0 Lightning Lightning hit a substation in Marion, causing a loss of power to 3000 subscribers.	Deuel County, Gary	Eight inches of rain fell in about four hours. Q5 213Q CST Q Q Q Q TSTM Wind (58:
Sumter County, Dalzell	27 1530EST 0 0 3 0 TSTM Wind Wind blew the top off of a trailer near Dalzell.	Hyde County, 19S Highmore	06 1600 CST 0 0 3 0 Hail (2.75), TSTM Wind (52) A thunderstorm produced baseball size hail and strong winds in Stephan. Many windows were broken and large tree branches were downed.

PLACE		E - LOCAL	STANDARD	STH OF PATH	WIDTH OF PATH (YARDS)	I PE	O. OF RSONS		ATED!	CHARACTER OF STORM	PLACE		TIME - LOCAL STANDARD	STH OF PATH MILES)	WIDTH OF PATH (YARDS)	PEI	D. OF RSONS		ATED'	CHARACTER OF STORM
	DATE	T	STA	LENGTH (MILE	TQIW )	KILLED	RUCK	PROP	CROPS			DATE	TIM	LENGTH (MILE	¥(D)	KILLED	INJURED	PRO	CROPS	
SOUTH D	ЭΑК	OTA									— south	DAK	OTA							
Lyman County: 5W Chamberlain	Ø6	1600	l to	. 4	50	ø	0	ø	0	Tornado (FØ)	Brule County, IN Chamberlain	96	18 <b>0</b> 7 CST			0	0	Ø	0	Hail (1.75)
5WSW Chamberlain	Ø6		CST	.3	40	ø	ø	0	ø	Tornado (FØ)	Buffalo County, 7.3NW Shelby	96	1808 to 1810 CST		20	Ø	0	0	0	Tornado (F0)
		1617	CST		orted	ì.					Brule County, 55 Chamberlain	26	1815 CST			Ø	Ø	Ø	0	Hail (1.75)
Hughes County, 25£ Pierre		1604				Ø	Ø	ø	ø	Hail (1.75)	Lyman County, 3N Chamberlain	26	1830 CST			Ø	Ø	Ø	0	Hail (1.75)
Lyman County: 5NW Chamberlain	<b>0</b> 6	1615		1.0	100	ø	Ø	?	?	Tornado (F1)	Brule County, 12NW Kimball	06	1840 CST			0	Ø	Ø	0 ,	Funnel Cloud
45W Chamberlain	206	1625	cst ta	.5	40	ø	ø	Ø	ø	Tornado (FQ)	Jerauld County, Wessington	26	1900 CST			0	0	2	0	TSTM Wind (52)
	No		CST e wa	s rep	orted	i.					Springs Hyde County,	26	1910 CST			Ø	Ø	ø	ø	Hail (1.75)
Hyde County, 13SW Highmore	<b>0</b> 6	1620	CST	-		Ø	ø	Ø	0	Hail (1.75)	225 Highmore Buffalo County,	86	1915 CST			0	Ø	ø	Ø	Hail (2.75)
Hand County, 19SE Highmore	<b>29</b> 6	1658	CST			0	0	ø	Ø	Funnel Cloud	SN Fort Thompson  Jerauld County,  11SW Wessington	<b>36</b>	1939 CST			ø	ø	ø	Ø	Hail (.75)
Hyde County, 19S Highmore	<b>0</b> 6	1707	CST			Ø.	0	Ø	0	Hail (1.75)	Springs Buffalo County,	la.	2050 CST			a	Ø	3	7	Hail (2.5)
Lyman County, 15S Stephan	<b>2</b> 16	1710	CST			Ø	0	?	?	Hail (2.50)	1S Fort Thompson					·			•	
Hand County, 22SE Highmore	<b>2</b> 16	1715	ÇST		,	Ø	0	3	ø	Hail (1.75)	Miner County,	bro	nundersto ke window 2104 CST	s and					ø.	#11 that Hail (1.75)
Buffalo County, 2N Fort Thompson		1715 1715				0	0	Ø	12 12	Hail (1.75) Funnel Cloud	28NE Mitchell 21NE Mitchell	00	2164 (31			•	•	•	•	
Lyman County: 75W Fort Thompson	26	1715 1720		Ø <b>.</b> 1	20	0	Ø	0	Ø	Tornado (FØ)	Kingsbury County, 25W Badger		21 <b>45</b> CST			Ø	0	Ø	0	TSTM Wind (66)
5SW Fort	96	1720	to	Ø. 1	30	Ø	ø	ø	0	Tornado (F@)		hou	se and bl	ew a						
Thompson 45W Fort	<b>2</b> 16	1725	to	Ø.2	30	ø	ø	ø	Ø	Tornado (FØ)	Hamlin County, 1255E Watertown		22 <b>0</b> 5 CST			0	6	Ø	Ø	TSTM Wind (60)
Thampson	Thre	1728 e to orted	rnado	es to	ouche	d do	wn br	ief]y	and	no damage was	Deuel County, 15SE Watertown	96	22 <b>00 CST</b>	•		Ø	0	Ø	Ø	TSTM Wind (58)
Buffalo County: 1W Fort Thompson	'	1726 1728	to	0.1	20	Ø	ø	ø	ø	Tornado (FØ)	Union County, 3N Alcester to 6.ZE Alcester	<b>2</b> 7	0010 to 0023 CST		50	Ø	0	?		Tornado (F2)
1SW Fort Thompson	26	1727 1729		<b>D.</b> 1	20	Ø	Ø	0	Ø	Tornado (FØ)		Sou		to H	laward	en,	Iowa.	. The	torn	of Alcester, ado damaged path.
	Two	torn	ados	DCCU	red l	brie	fly.	No da	mage	was reported.	Walworth County, Mobridge	<b>2</b> 19	1515 CST			ø	Ø	ø	0	Hail (1.75),
Lyman County, 32NW Chamberlain	26	1730	CST			0	Ø	Ø	0	Funnel Cloud	Walworth County,	<b>8</b> 9	1530 CST			ø	ø	ø	ø	TSTM Wind (50)
Buffalo County, 7NW Gann Valley	<b>2</b> 6	1730	CST			Ø	0	3	ø	TSTM Wind (60)	Mobridge Stanly County,	29	1534 CST			ø	ø	Ø	Ø	Hail (1.0)
Lyman County, 13N Dacoma to 12N Dacoma	86	174Ø 1745		1.0	75	0	Ø	3	?	Tornado (F1)	25W Pierre Jones County, 36SW Pierre	<b>0</b> 9	1545 CST			ø	0	0	0	Haîl (1.75)
										ma,breaking from its	SUUM I ANTI E	Gal-	fball siz	e hai	l fel:	l at	Capa	ı.		
Buffalo County:	Four	dati	on.	Other	- smal	ller	buil	dings	were	damaged.	Sully County, 30NE Pierre	<b>0</b> 9	1728 CST			0	Ø	10	Ø	TSTM Wind (\$4)
1.85W Fort Thompson to 8NW Shelby	ьь	1745 1805		В	40	0	Ø	?	?	Tornado (F0)	Lyman County, 14W Chamberlain	<b>2</b> 9	1730 CST	.5	50	Ø	0	3	Ø	Tornado (F1)
SE Fort Thompson	<b>9</b> 6	1750	CST			0	Ø	0	0	Hail (1.75)			ornado de alf shelt		ed a s	st <b>e</b> e1	l bar	n, a	steel	pole shed and
7SE Fart Thompson	36	1752 1754		.5	30	Ø	Ø	10	0	Tornado (FØ)	Hyde County, 195E Highmore	<b>2</b> 9	1900 CST			0	Ø	Ø	0	Hail (.75)
Lyman County,		torna 1752				and r	no da:	mage i	was ro	eported. Tornado (FØ)	Brown County, 3S Aberdeen	<b>2</b> 9	1815 CST			Ø	0	Ø	0	Funnel Cloud
9.3NW Shelby		1754							•		Roberts County, Summit	1	2015 CST			0	0	4	?	TSTM Wind (64)
Faulk County, Onaka	<b>8</b> 6	1755	CST			Ø	0	3	?	Hail (1.75)		topi	oled a ra	dio-T	s dama V towe	aged er.	bui l	di ngs	and	crops, and
Hyde County, 20SSE Highmore	96	1800	CST			0	Ø	4	3	Hail (4.5)	Hutchinson Co., 2N Menno	29	2025 CST			Ø	0	4	0	TSTM Wind (60)
	hour and	r. Na many	umero crap	us wi	indows	s and	l tre /ed	e bra The h	nches ail s	or about an were broken wath was wide.		dam. Six	nderstorm aged tree sheep. A ndation.	s. A	barn	was	heav	ily c	lanage	d, killing

					·· ,	,		· · · · · · · · · · · · · · · · · · ·	_					<del>,                                     </del>
PLACE	1   95	LES) JE PATH RDS)	NO. OF SHOCKS SHOULD BE SH	ESTIMAT DAMA(		PLACE	DATE	TIME - LOCAL STANDARD	LENGTH OF PATH	WIDTH OF PATH (YARDS)	NO. OF PERSON	VS DA	CROPS WAGE	CHARACTER OF STORM
SOUTH C	AKOTA					SOUTH	DAK	OTA						
Codington County, 17N Watertown		Ø	Ø	3 0	TSTM Wind (66)	Minnehaha County, Dell Rapids	11	1515 CS	т	1	0 0	Ø	Ø	TSTM Wind (52)
	Thunderstorms	overturned	a semi	-truck	on Interstate 29.	Stanley County: 38W Pierre	11	1615 CS	т		2 Q	Ø	Ø	TSTM Wind (54)
Yankton County, Irene	09 2125 CST	Ø	Ø	3 0	Hail (0.5)	5W Pierre 3S Oahe Dam	11	1630 CS 1630 CS	т		0 2	3	2 Ø	TSTM Wind (54) TSTM Wind (64)
Deuel County, 1SE Watertown	09 2130 CST	0	Ø	0 0	Funnel Cloud	Fort Pierre		1643 CS			0 0	4	4	Hail (1.75) TSTM Wind (68)
Deuel County, Bemis to ZN Clear Lake	89 2130 to 8 2150 CST No damage was		Ø	??	Tornado (FØ)		ove dam Sev	r by thu aged hou	nderst ses, m	arm wi obile	nds at homes .	Fort and 250	Pierre 10 acr	k was blown . The winds es of crops. r trailer was
Mellette County,	  0 1510 to .1		ø	ø ø	Tornado (FØ)	Hughes County,		1643 CS	т		0 0	ø	Ø	TSTM Wind (70)
Cedar Butte	1512 CST No damage was	reported.				Pierre McCook County,	11	1830 69	зт		0 0	3	4	TSTM Wind (60)
Mellette County, Cedar Butte	10 1526 CST	Ø	Ø	3 0	Hail (2.5)	Salem	bin	and 600	acres	of cr	aps.	Severa	l wind	Hail (1.75)  yed a grain lows in a
Stanley County: 25SW Pierre Hayes	10 1553 CST 10 1555 CST	2 0		0 0	Hail (1.75) Hail (2.75)			eral tra				ther o	uiiain	gs were damaged
Jones County:						Hutchinson Co., SSE Menno	11	2 <b>000</b> C9	Τ		0 0	3	Ø	TSTM Wind (56)
Capa 405W Pierre	10 1555 CST 10 1620 CST	Ø		0 0	Hail (2.75) Hail (1.0)		Ag	arage wa	s dest	royed	by thu	nderst	orm wi	nds.
Sully County, 20NE Pierre	10 1645 CST	Ø	Ø	Ø Ø	Funnel Cloud	McCook County, 10E Salem	11	2001 CS	ST .		0 0	Ø	Ø	Hail (1.75)
Stanley County, 30W Pierre	10 1649 CST 10 1705 CST	Ø Ø	Ø	Ø Ø	Hail (2.75) Hail (1.75)	Yankton County, 6W Yankton	11	2020 CS	šΤ		0 0	0	Ø	Funnel Cloud
Edmunds County, Ipswitch	10 1920 CST	Ø	Ø	0 0	TSTM Wind (70)	Clay County, Irene.	11	2025 CS	iΤ		0 0	Ø	Ø	TSTM Wind (52)
Brown County: Westport SN Aberdeen	10 1920 CST	2 2 2	0	0 0 0 0	TSTM Wind (52) Funnel Cloud TSTM Wind (52)	Haakon County, Milesville		2782 CS			@ 0	Ø hes of	Ø	Heavy Rain from 400 AM
5NW Aberdeen Lake County,	10 1955 CST 11 0100 CST	2		2 0	TSTM Wind (52)	5-11 8: 5-	CST	to 700 2030 CS	AM CS1		a a	7	Ø	
Madison Douglas County,	11 0130 CST	Ø	Ø	2 0	TSTM Wind (70)	Fall River Co., Battle Mountain							-	Lightning
6W Delmont Charles Mix Co.:						Corson County:	Lig	htning s	struck	a fore	st are	a,burn	ing 22	00 acres.
Lake Andes BE Lake Andes	11 0130 CST 11 0140 CST Severe thunder	0 0 rstorm winds	Ø Ø blew o	4 0 3 0 over an	TSTM Wind (70) TSTM Wind (64)	1W Morristown McIntosh 11SE McIntosh	19 19 19	2213 CS 2245 CS 2320 CS	ΙT		0 0 0 0 2 0	3 Ø Ø	4 ? Ø	Hail (1.75) Hail (1.5) Funnel Cloud
Brookings County,	mobile home. Several trees	Several bui were uproot	ldings		eavily damaged.  TSTM Wind (70)		tha Sev	t extend eral acr	ed fro es of	m near crops	Thund	erhawk	to Mc	hail swath Laughlin. windows
INE Volga	Thunderstorm : damaged other	winds tore t	he top			Lyman County, Kennebec	1	houses w		oken,	0 0	Ø	Ø	Hail (1.5)
Bon Homme County, Springfield	] "	Ø	0	0 0	TSTM Wind (64)	Beadle County: 13NW Huron 1S Huron		1830 CS 1900 CS			0 0	Ø	Ø Ø	Hail (2.00) TSTM Wind (56)
Hutchinson Co., Parkston	11 0200 CST	0	Ø	6 4	TSTM Wind (78)	Hamlin County, Castlewood	20	1940 CS	Т	1	D Ø	2	Ø	Lightning
	Four miles lor Parkston to ne and houses wer	ng extending ear Alexandr re heavily d	from s ia. Se amaged.	six mil everal . Two	farm buildings small airport	Kingsbury County, 35E Huron	des	ntning s traying 1958 CS	the ph	one an				
	hangars, a sma were destroyed uprooted. Abo	d Numerous	trees	were b			Thui	nderstor	m wind	s blew	qowu i	power :	lines	and trees.
McCook County, Canistota	11 <b>0</b> 240 CST	a	Ø	0 0	TSTM Wind (70)	Harding County,	21	2155 CS	Т	ı	2 Ø	Ø	Ø	TSTM Wind (63)
Minnehaha Co.,3NW Dell Rapids to 3NE Dell Rapids	11 0302 to 9 0317 CST	5 100 0	0	4 2	Tornado (F2)	Pennington Co.: 10NE Rapid City 2W Rapid City	22	1545 CS 1643 CS	τ	i	2 2	3 2	Ø	Hail (.75) Hail (1.75)
	A tornado occo Minnehaha Cou three miles no and small shea heavily damago destroyed.	nty,about 30 ortheast of ds, some of	2 CST, Dell Ra Which (	moved apids. were li	east and ended Barns, silos fted, were	Ziebach County, IW Isabel  Corson County: IS Morristown IW McIntosh	22	1955 CS 2010 CS 2015 CS	т	Ç	9 0 9 0	Ø Ø	Ø Ø	Hail (.75) Hail (2.5) Funnel Cloud
Clay County, Vermillion	11 1430 CST	i	Ø	ø ø	Lightning									s ball size windows.
	Lightning kill equipment, M&G		ile he	was op	erating farm									
						J L								

					,—												JULY 1987
	CAL	PATA H	PE	O. OF RSONS		ATED1				3CAL	PATH	Ę		OF		ATED!	6
PLACE	DATE TIME - LOCAL STANDARD	LENGTH OF P. (MILES)	(YARDS) KILLED	INJURED	PROPERTY	CROPS	CHARACTER OF STORM	PLACE	DATE	TIME - LOCAL STANDARD	LENGTH OF	WIDTH OF PAT	KILLED	INJURED	PROPERTY	CROPS	CHARACTER OF STORM
SOUTH D	AKOTA							TENNES	SEE								ļ
Dewey County: 1W Isabel 10SW Timber Lake	22 2025 CS 22 2035 CS		Ø Ø	Ø Ø	3 Ø	Ø ?	Hail (.75) Hail (2.5)	Gibson County	New Skul		mun1ty	. Dama	ige wa	s est	imated	at \$1	Thunderstorm Wind ling in the ,000. A wind-
	Thunderstor hail destro windows in	ying sever	alac	res o	f cro	ps, b	reaking	Henry County	04 Hali	Evening the roo	f of or	ne grand	0 detand	0 at t	3 :he Hen	3 ry Cou	Thunderstorm Wind nty Fairgrounds of damage also
Potter County, 9W Haven	22 2125 CS	T .	Ø	Ø	0	Ø	Hail (.75)										everal trees were ng winds.
Walworth County, Mobridge	22 213 <b>0</b> C5	т	Ø	Ø	4	Ø	TSTM Wind (60)	Nashville, Davidson County	1	Morning	ruck h	v 14ahtr		I			Lightning
}	Thunderstor treatment p								kno a c	cked unco hest pain	nsciou when	s for a hit, but	brief t felt	per	iod. I	ie repo	rted that he felt d and appeared to
Dewey County, 25SW Mobridge	22 2219 CS	iΤ	Ø	28	0	0	Funnel Cloud	Clarksville,		tain no 1 1600CST	ascing	injury.		0	4	0	Thunderstorm Wind
Campbell County, BN Glenham	22 2330 CS		0 burne	Ø dah	4 ouse.	0	Lightning	Montgomery County	at t peel and	he Bright led away a window g	Leaf bout lass we	Burl <b>ey</b> 12,000 s ere blow	and D square on out	ark T feet Da	obacco of ro mage w	Warehofing of as almo	ksville, notably ouse, where winds material. Door ost \$20,000.
Meade County, 9NE Rapid City	23 1530 CS	īΤ	Ø	Ø	0	Ø	Hail (.75)	Livingston,	1	rous tree		e downed	i arou	nd Cl	arksvi. 4	11e. 0	Thunderstorm Wind
	23 1540 CS 23 1647 CS		Ø	Ø Ø	Ø	Ø	Hail (.75) Hail (1.75)	Overton County	An hom bas	early eve e in the eball fie	ning t Buena 1d was	Vista su	torm bubdivi	lew :	a sect:	ion of Living	roof off of a ston Academy x and fencing
1W Avon Tyndall	24 1500 CS 24 1615 CS		Ø Ø	Ø	0	Ø	Hail (1.75) Hail (1.0)	Loudon County		e destroy Evening	ed.		0	0	3	0	Thunderstorm Wind
Jackson County: Kadoka Long Valley	24 1730 CS 24 1800 CS	TE T	Ø Ø	Ø	3	<b>0</b> 3	Lightning Hail (2.75)		whi and	Lakeland	ed in Drive	power ou Light	utages tning	, ma	inly in	the B	and Lightning s eals Chapel Road are ems when trans- Lenoir City
	Lightning b Thunderstor crops and w	rms produc windows on	ed bas	sebal 1	l siz	e hail	damaging	Cumberland, Roane, Anderson, and Campbell Counties	Jus 05	2000EST 2050EST		srupting	g emer	gency 0	3	micati O	ons. Thunderstorm Wind
Pennington Co., 25W Rapid City	25 1930 CS		orest,	<b>b</b> urni	3 ing t	0 welve	Lightning acres.	•	And lin	erson Cou es. Line	nties s were	due to t downed	trees on th	and : ie Cui	limbs f mberlar	alling d-Roan	nd, Roane, and across power e county line near ty at Dutch Valley
Meade County, Sturgis	26 1835 CS	ST .	Ø	2	1	Ø	Lightning	Hamilton County	and west	Granite : tern port	Road a	s well a	as Bun Ll Co	ch Re	oad, I	rees w	ere downed in the
Deuel County, 7W Clear Lake	Lightning s		ouse a	and mi	inor (	damage Ø	d occurred. TSTM Wind (68)	namifetin county	Stro hous Hami	se plants	. Wind	is also	destr damag	oyed ed th	about ne supp	\$3,000 orting	Thunderstorm Wind worth of green- structure at the A large tree was
	Thunderstor	rm winds b	lew do	נש חשכ	ind m	ills,	two hay sheds,	Chattanooga,	09	2040EST			0	0	5	0	Lightning
Perkins County: 95W Lemman Lemman 12S Lemmon	31 1730 CS 31 1740 CS 31 1740 CS	ST	Ø Ø	Ø Ø	i 0 2	Ø Ø	TSTM Wind (52) Hail (1.75) TSTM Wind (54)	Hamilton County	cont		artmen	ts on B	arton	Aven	ue in		or of a house Chattanooga.
Dewey County, 65 Timber Lake	31 1900 CS	ST	Ø	Ø	1	0	TSTM Wind (54)	Smithville, De Kalb County		1315CST		eba Cui	0	0	4		Thunderstorm Wind
Potter County, Gettysburg	31 2230 CS	ST.	Ø	Ø	4	7	TSTM Wind (42)		were Fall	stacked	on top caused	of each	h othe ural o	er an damag	d were	damage	d significantly. in the Oaklawn
40 TENNESSEE							eater screen re damaged.	Hickman County	Viol alon The to a brok was the	g Highway winds cau house ac en, a can injured s	100 i sed ro ross t opy wa lightl ong th	n the Ly of dama; he road s downed y when the	yles a ge to . At d, and the ca that	area an a the area area area area area area area ar	of nor djacen market pumps e was downe	al dama thern E t build , large were t iriving	Thunderstorm Wind  uge to a market  ickman County,  ling, as well as  e windows were  coppled. A woman  was blown off  was blown across
Sullivan County	Park Golf Co	truck and ki ourse just e	ast of	Kingsp	port.	The tr	Lightning criors Path State tio had attempted	Trousdale County	I3 Ligh	1330CST	rted a	fire w	0 hich (	0 destr	4 oyed a	barn a	Lightning and its contents courred.
Grainger County		M520, M360		n under O	rata O	11 tree	, situated on a  Thunderstorm Wind	Nashville, Davidson County	A wo				juries			vas tra	Thunderstorm Wind
	2130ES	T derstorm win s in scatter over a wide	ds and ed sect	tions o	combin of the count	ed to d	and Hail lamage tobacco and . Trees and limbs of which briefly		down	ed as num	erous	trees a	nd lir	abs w	ere bl	own dow	power lines were n by the winds. r temporarily.
Cocke County	03 Evening Lightning st off of Cosby	tarted a fir	0 e which		4 royed	0 a barn	Lightning (loss: \$25,000)										

														-					JULY 198
	OCAL.	PATH	¥TH (		OF SONS	ESTIM. DAM	ATED¹ AGE	CHARACTER				1	РАТН	HT 4		OF RSONS	EST IM	ATED1	CHARACTER
PLACE	DATE TIME - LOCAL STANDARD	LENGTH OF	WIDTH OF PATH (YARDS)	KILLED	INJURED	PROPERTY	CROPS	CHARACTER OF STORM	PLACE	DATE	and the	STANDARD	LENGTH OF I	WIDTH OF PATH (YARDS)	KILLED	INJURED	PROPERTY	CROPS	OF STORM
TENNES	SEE								TEXAS,	Nort	hei	'n							
LaVergne, Rutherford County	canopies at a one of the ca injury and cu	conven mopies its. Da	ience m landed mage al	on a d	. A ma car, a curred	inor nd a at a	cked de injury woman farme	Chunderstorm Wind own two large occurred when sustained a back r's co-op, am	Hunt County, Greenville Kaufman County: 3NW Terrell	Wine	1020 da gu	sted	to 60	miles a	0 in hou 0	0 ir at 0	? Greenv 4	? ille. ?	TSTM Wind (52)
	automobile sh stand at a ba damaged. Los	llnark	was fla	ttened Close	d, and to \$20	rest	rooms there.		Terrell	Wine		lestro							TSTM Wind st of Terrell and ey Junior College
Germantown, Shelby County	while working	seriou			when h		struc	Lightning k by lightning ing at the	Hopkins County,	1	1055				0	0	3	?	TSTM Wind
Somerville, Fayette County	Corporate Cer	iter.		0	0	4	0 1	Lightning	n 1 2	Mt11	ler G	rove.	d a	barn,	cow	shed,	and		one mile west of
,		sing ex	tensive	roof	damag	e, A	nother	h Main, setting it house on West mage was less	Henderson County, Athens				seve	ral tr	ees	and	: broke		ous tree limbs at
Brentwood, Williamson County	23 Afternoon	erstorm	winds o	0 occurr	0 ed in	3 the S	tonehe	Thunderstorm Wind	Collin County, 7E Plano	ł	2330 and		nch di	ameter	0 hail	0 fe11	? 7 miles	? east	Hail (1.50) of Plano.
Davidson and	of Brentwood which also de 23 1415CST-	and da	maged a	a numb	er of	roofs	and d	owned several trees	Kaufman County, Terrell	1	0350 /y ra		1ooded	street	C s at	0 Terre	?	?	Flash Flooding
Wilson Counties	A home in Her the resulting struck a hous \$70,000 and	rmitage g fire d se in Mt \$80,000	estroye . Julie in dama	idson of the et in the et	County roof Wilson Strong	was and g Coun thun	struck arage. ty, ca dersto	Thunderstorm Wind by lightning, and Lightning also using between rm winds blew over t. Juliet Road	Henderson County, 7NW Eustace Trinity County,	Rain Barr		of City		inches ustace)		0 one 0	? hour :	? Eloode ?	Flash Flooding d streets at Gun Hail (1.75)
Memphis,	and a tree ac							/ Thunderstorm Wind	2N Trinity				e hail	fell 2	mile	s nor	th of	Trinit	
Shelby County		winds a	lso cau	used m	inor s	truct		rk, as strong amage to a few	Hamilton County,  3SE Lamkin  Comanche County:  ISE Lamkin  Lamkin	15	1545 1545 1630	CST			0	0	? ? ?	? ? ?	Hail (1.75) Hail (1.75) Hail (1.75)
Montgomery County		used a f					ge she	Lightning d and damaged a about \$7,000.	Dame III	Golf of thur	E ba Lamk	ll si in torm	o l remai	mile s ned ne	along outhe arly	High ast stati	way 36 of Lar	from skin droppi	3 miles southeast at 1545CST. The ng golf ball size nches of rain had
Murfreesboro, Rutherford County		rom a th	se on I	Reid S	treet,	caus	e which	Thunderstorm Wind h fell on the out \$1,000 in car parked	Bosque County, Meridian	fall 15	len a	t Lam	kin.	11 at M	0	0	?		Hail (0.88)
Memphis, Shelby County	29 1500CST	ruck by					njured	Lightning as he sat under 290	Hood County, Tolar Dallas County:	1	1640 -siz		l fell	at Tol	0 ar.	0	?	?	Hail (0.75)
-									2NE DFW Coppell Tarrant County, Grapevine	16 16	1820 1840 1840 tunne	CST	oud w	as obs	0 0 0 erved	0 0 0 2 m	0 ? ? viles no		Funnel Cloud TSTM Wind (52) TSTM Wind (52) st of Dallas/Fort
41 TEXAS, Nor	thern								Tarrent County,	Copp		and G		1820CS ne at l			gusted 0		miles an hour at
Cooke County, Myra	2 0500CST	i a ores	nhouse	0	0 re ante	3		TSTM Wind	Arlington	A fu	inne l	clou	d was	observe				ington	at 1845CST.
Denton County, Sanger	2 0900CST			0	0	3	?	TSTM Wind	Dallas County, Dallas	Wind		amage		houses ere als					TSTM Wind A number of trees
Young County, Graham	2 0930CST Quarter-size	hail fe	ell at (	0 Graham	0	?	?	Hail (1.00)	Leon County, 2SE Centerville	A t		do k				0 t 20	? tree:		Tornado (FO)
Tarrant County: Fort Worth Bedford	2 0940CST 2 0940CST	it to f	iΩ π-≀1-	0 0	0 0	? 4	?	TSTM Wind (52) TSTM Wind	Kaufman County, Forney	"	1655 is do		power	lines a	0 nd br	0 oke c	? ·		TSTM Wind s in Forney.
Collin County,	winds guster winds damage						d.	TSTM Wind											
Dallas County,	Winds damage			0	0	ildin ?		llen. TSTM Wind											
Rockwall County, Rockwall	Winds uproote 2 1015CST Winds partia			0	0	4 ockwa1		TSTM Wind									·		
	,										_								

PLACE	TTIME - LOCAL STANDARD STANDARD STANDARD STANDARD STANDARD CROPS STANDARD CHIES) NO. OF PATH (ARRS) CHUES) STANDARD CHARGE CHARACTER OF STORM ST	PLACE	MILTE OF PATH CROSS OF STIMATED TO STAND OF PATH CROSS OF STIMATED TO STAND OF PATH CROSS OF STIMATED TO STIMATED
	TIME STANDTH WIDTH (NUR PROPE		TIME STAND S
41 TEXAS, South	nern	41 TEXAS, West	ern
Blanco County	01 1645CST 0 0 0 0 Hail (1.75) 01 1645CST 0 0 0 0 Tstm.Wind (?)	Hutchinson County	01 1905CST 3.0 80 0 0 0 Tornado (F1)
	Golfball size hail fell in the southeast part of the county near the Hays County line. Damage was not reported. High winds from the same thunderstorm uprooted trees.		A tornado touched down five miles east of Borger in open rangeland. The parent thunderstorm later produced the Skellytown (Carson County) tornado.
Liberty, Montgomery, Polk and San Jacinto Counties	02 1430-1530CST 3 0 0 0 Tstm.Wind (?) On the San Jacinto County side of Lake Livingston, high winds from	Carson County	01 1920CST 0 0 0 0 Funnels 1922CST 0 0 4 0 Hail (1.75) 1930CST 4.5 200 0 0 0 Tornado (F2)
	a thunderstorm produced rough water and capsized two boats. 3 of the 4 occupants of one boat drowned while 2 persons of another boat made it to safety. In western Polk County and south and southwes Montgomery County, trees were uprooted. Also trees were toppled in the northwest part of Liberty County near Cleveland. M650, M560, F560.	ŧ	Numerous funnel clouds were reported around Skellytown. At 1930 CST law enforcement personnel described a large rotation with "three small tornadoes"apparently a multiple vortex tornado-that trekked to just west of town at 1940 CST. The storm was accompanied by golfball-sized hail that broke out windows in town.
Harris County	02 1651CST 0 0 0 0 Tstm.Wind (50) High winds from a thunderstorm gusted to 58 MPH at Hobby Airport. Damage was not reported.	Armstrong and Carson Counties	01 2036CST
Trinity County	07 1420CST 0 0 0 0 Hail (1.75)  Golfball size hail fell on Hwy.19 near the town of Trinity. Damage was not reported.		The Department of Public Safety (DPS) reported hail between golfball and baseball size falling at Panhandle in the southeast part of the county. At 2057 CST a tornado touched down seven miles north of Claude. The storm blew several automobiles and large trucks off Interstate 40 near Conway, injuring two truck drivers
Harris County	09 1000CST 1 0 0 0 Flooding  Heavy rains of up to 5 inches in some parts of Houston produced		at 2110 CST. The twister threw a large metal water storage tank across the highway and into a small cafe. At 2135 CST the tornado was last sighted two miles south of Claude.
. ,	serious street flooding mainly on the northeast and east side.  Jacinto City reported the heaviest rainfall and flooding problems.  A 3-year-old boy playing near a drainage ditch was washed down	Carson County	02 0016CST 0 0 0 0 Hail (1.75) A Deputy Sheriff reported golfball-sized hail at White Deer in the
	a culvert and drowned. Several bayous were reported running full in the city. Brays Bayou carried the main runoff from the flood waters. M30	Parmer County	eastern part of the county. 02 1715CST 2.0 100 0 0 0 Tornado (F1)
1 1	17 0059CST 0 0 0 0 Hail (1.75)  Golfball size hail was reported in the county. Exact location	, , , , , , , , , , , , , , , , , , , ,	The Friona Police Department sighted a tornado eight miles north of Friona, in the extreme northern part of the county. The tornado was in open ranchland and inflicted no apparent damage.
	and damage was not reported.	Hale County	02 1923CST 0 0 0 7 Hail (1.75)
Blanco, Gillespie, Hays, Kendall, Kerr, Kinney and Real	17 0145CST through 10 33 6 ? Flash Flooding afternoon		The Hale County Sheriff's Office reported golfball-sized hail one mile south of Cotton Center.
	Late in the evening hours of the 16th and the early morning hours of the 17th, very heavy thunderstorms formed in northeast Edwards and northern Real counties and moved slowly eastward into Kerr	Lubbock County	02 2102CST
	County. The heavy thunderstorms produced up to 11.5 inches of rain 9 miles west of Hunt. 5 to 10 inch totals were common from western Kerr County east to western Blanco County. The resulting flood		The weather observer at Reese Air Force Base reported a funnel cloud four miles north of the base.
	waters on the Guadalupe River resulted in one of the most tragic life-taking events in the Texas Hill Country history. In the eastern part of Kerr County, just west of Confort, Tx. at about 0645CST.	Sherman County	03 0457CST 0 0 0 ? Hail (1.75) Golfball-sized hail was reported by DPS Troopers near Texoma.
	a caravam of buses and a van were leaving a summer youth camp to return to their homes when a bus and a van stalled in the shallow	Ochiltree County	03 0625CST 0 0 0 0 Hail (1.75)
	water at the bank of the Guadalupe River. The bus and van happened to arrive at the river bank when the river was on a very rapid rise. The campers were in the process of evacuating the two vehicles when		The Sheriff's Office reported golfball-sized hail in Perryton. The DPS reported hail of the same size in town at 0637 CST.
·	a powerful surge of water hit the area and swept 43 persons into the raging river. There were 39 teenagers and 4 adults, 10 persons drowned in the event and 33 were rescued mostly in tree tops by	Lynn County	03 1915CST 0 0 0 0 Hail (1.75)
	helicopters. Several were hospitalized and many suffered injuries from the ordeal.  Hundreds of other persons along the Guadalupe River and its tribu-		The Lynn County Sheriff's Office and DPS Officers reported golfball- sized hail six miles south of Tahoka. It fell in farmland where earlier flooding had destroyed the cotton crop, so no damage was reported.
	taries had to be evacuated beginning as early as 0145CST just west of Hunt. Many roads were closed throughout the above—mentioned counties and several cars were washed into streams and rivers. The	Lynn County	03 1955CST 0 0 0 0 Hail (1.00)
	Blanco River in Blanco and Hays counties rose about 15 feet and flooded nearby roads and low water crossings. 5 inches of rain was also reported in northern Kinney County where flash flooding		Skywarn Spotters reported one-inch hail nine miles east of O'Donnell, in the southeast corner of the county.
	occurred.  The heavy thunderstorms that produced this flooding event,	Winkler County	06 1520CST 0 0 0 0 Hail (1.75) The public reported golfball-sized hail in Kermit. At 1555 CST the
,	meteorologically speaking, were caused by a rare event for the middle of July in South Texas. The unstable atmosphere was created	01	public reported golfball-sized hail at Wink.
	by a small but intense disturbance in the westerlies which normally are well north of South Texas in mid July. One NMS radar observer was quoted as saying that slow-moving heavy thunderstorms (train effect) traversed the area for several hours.	Sherman County	07
	F13V, F14V, F14V, F15V, F16V, F16V, M16V, M16V, M17V, M18V  24 1405CST 0 0 0 Tstm. Wind (?)		61 knot winds and heavy rain, that damaged numerous roofs, downed several power lines, and produced extensive window damage. One mobile home was totally destroyed.
	Righ winds from a thunderstorm uprooted trees in the county.	Lamb County	07 2005CST 0.1 30 0 0 0 0 Tornado (F0) 2029CST 0.5 40 0 0 0 0 Tornado (F0)
			A tornado briefly touched down just west of Amherst, according to the DPS. About 25 minutes later, the same thunderstorm produced another tornado just west of Littlefield.
		Bailey County	07 2010CST 0 0 0 0 Hail (4.50)
			The Sheriff's Office reported baseball to softball size hail near Bula, in the eastern part of the county.

	CAL	PATH	£	PER		STIMA DAMA					OCAL	РАТН	ATH.	NO. PER		ESTIM/ DAM		CHARACTER
PLACE	DATE TIME - LOCAL STANDARD	LENGTH OF	WIDTH OF PAT	KILLED	INJURED	PROPERTY	CROPS	CHARACTER OF STORM	PLACE	DATE	TIME - LOCAL STANDARD	LENGTH OF (MILES)	WIDTH OF PATH (YARDS)	KILLED	INJURED	PROPERTY	CROPS	CHARACTER OF STORM
TEXAS,	Vestern				····				TEXAS,	West	ern				•			
Lubbock County	07 2155CST			0	0 .	0	0	Hail (1.75)	Gray County	14	1800CST	4.5	150	0	10	6	0	Tornado (F2)
	Skywarn Spot Lubbock. Th west Lubbock	ed hail ters er e publi , and l	l but s ncounte ic sigh l5 minu	urpris red go ted ha tes la	ingly li lfball-s il of th ter golf	ttle ized ie sam ball-	damag hail ne siz sized	e. At 2155 CST,		to to were sust	he Coronac destroyed	io West Land s Lamag	Traile	r Par rs da	k. A maged	total . Thr	of ni	ttensive damage ine mobile homes manent houses three requiring
	storm.								Armstrong County		1815CST			0	0	0		Hail (1.75)
Hall County	12 1622CST Memphis Poli		ountere	ed golf	-	-		Hail (1.75) we miles west of	Briscoe County	Į.	otter repo	orted 8	oripari	-size	0			Hail (2.75)
	Memphis.								brisese county	Golf	pall-sized					y Skyw	arn St	orm Spotters in
Floyd County	12 Est.171 Straight-line poles at Ced	e thunde	erstorm 1, in t	0 n wind the nor	of unkno	own fo	orce s	TSTM Wind snapped two power county.		hail Silv the	stacked userton. The county's c	ip seve ie mass cotton.	ral inc ive hai This	hes d lstor was t	eeps mdes hewo	ix mil troyed rst co	es nor about tton l	f, baseball-sized th and east of 40 percent of loss due to hail
Hall and Donley Counties	12 1720CST	:		0	0	0	0	Hail (1.75)	Floyd County	14	≥ 1934, ac 2035CST	corain	ig to vi	0	0	3		Hail (2.00)
	Golfball-siz between Memp east Donley	phis i	n north	reporte neast H	d by Мел all Coun	nphis nty a	Polic and He	e Officers edley in south-		exte heav	nsive dama	age to	cotton.	Cor	n was	strip	ped of	nty, doing f its leaves and as thought to have
Swisher County	12 Est. 180			0	0	0		Hail (1.75)	Midland County	18	1730CST			0	0	0		TSTM Wind (70)
	Hail as larg corn crops f long swath.	e as go ive mil	olfball les wes	s brou	ght exte ulia. T	he ha	iil fe	ge to cotton and ill in a six-mile-		At 1	745 CST th	ne Midl	land Fi	re Dep	artme	0 at Mid int rep	land i	Hail (0.75) Regional Airport. 0.75 inch hail
Lubbock and Crosby Counties	12 1900CST			0	0	0	0	Hail (1.75)	Hutchinson and	1	he northwe	est con	ner or	o 0	0 0	0	0	Hail (1.75)
	size pounded near the com	i northe mmunity	east Lu of Est	ibbock acado,	and nort The ha	hwest il fe	: Cros	near golfball in by counties, or about 15 ed farmland.	Moore Counties	The					1fbal	l-size	d hai	l falling along the
Lubbock and Terry Counties	12 2055CST	i		0	0	0	0	Hail (1.75)										
Lynn County	west of Wolf	fforth, il of th nity in was also y.	in the he same south	south size vest Lu	west par as it mo bbock Co	rt of oved s ounty ST in	the c southwat 21 far r	five miles south- county. The storm ward, west of the 115 CST. Colfball- cortheast Hail (1.00) TSTM Wind	42 UTAH UTZOll Southern Mountains	A C							60 mp	High Wind (G52) h wind gust along No thunderstorms
	Lynn County, wind also st and barn dam	, bring truck ti mage.	ing wit	th it o eview C	me-inch ommunity	hail. y, ini	. Sti flict:	through northwest rong straight-line Ing roof, tree,		were cold wind west	in the front many signed in the second in th	area, oving thun	but the into U 50 mp	e wind tah. h were	Seve seve	produceral of eived i	ced by ther from l	a strong Pacific reports of strong ocations over the f the high wind
Hutchinson County	14 1520CST 1520CST			0	0	6	0	Hail (1.75) TSTM Wind (58)	Wasatch County, Heber City	18	1800MST			1	2	1	0	High Wind
	A large supe straight-lin hail in Borg wind gusting	ne wind ger inf.	to sout	thern p	arts of tree, an	the o	count; tomob:	y. Golfball-sized ile damage, while	UTZ003	A ogers	rosswind . Two ot: 1938MST	tipped her pas	over ssenger	a semi s were	inj	ck kill ared in	the	ne of the passen- accident. MO7V High Wind (G57)
Hansford County	Meredith Mar	rina.		0 0				Tornado (FO)	Wasatch Front	An i	solated w			65 mg	h, th	sat wa	ıs appı	arently due to a
nanstore councy	The Sheriff'	s Offic	ce repo miles s	rted a	tornado f the st	in tate 1	he no ine a	rthwest part of nd ten miles wast ountry, doing no	Salt Lake County, West Valley City		t - 11ved derstorms 1145MST							Valley City. No time. Hail (1.00)
	discernable	damage.	•						Salt Lake County, Salt Lake City	21	1216MST			0	0	4	0	Flash Flood
Ochiltree County	14 1555CST			0	-			Tornado (F1) orth, downing	Utah County, South Provo	21	1220MST			0	8	6	6	Hail (1.75)
	power lines	and dan	maging	a mobi	le home.				Utuh County, Provo Summit County,	21	1229MST 1230MST			0	0	1	0	Heil (1.75) Thunderstorm
Southern Panhandle and Northern South	14 Evening			0		-		Hail [delinested] Tornado below	Hoytsville Summit County,	21	1230MST			0	0	4	0	Wind Hail (1.50)
Plains	A massive su	percel'	1 thurd	lerstor	m ripped	i thro	ough f	ive counties	Hoytsville Rich County, Garden City	21	1230MST			0	0	1	0	Hail (1.25)
	in the south	ern Par	nhandle otton c	and n	orthern A damagi	South ng to	Plai rnado	ns, resulting mauled Pampa,	Summit County, Coalville	21	1233MST			0	0	1	0	Hail (2.75)
	causing 10 i	injuries the los	s. The ss was	Texas in exc	Agricul ess of f	tural ive m	L Exte	msion Service on dollars for	Utah County, South Provo	21	1234MST			0	0	1	0	Hail (1.75)
	cotton damag losses in ad breakdown of	ljacent	countí	es. T	aione, he follo	with wing	prope is a	rtionate county-by-county	Utah County, Prove BYU Utah County	21 21	1240MST			0	0	1	0	Hail (1.13)
Carson County	14 1718CST		J	0	0	4	6	Hail (2.50)	Utah County, Springville Utah County,	21	1240MST 1245MST			0	0	1 1	0	Heil (2.00)
	1750CST	ſ	******	0	-	-	0	TSTM Wind (52)	Springville Salt Lake County,	21	1255MST			0	0	1	0	Thunderstorm
	windows in P	enhandl to 52	le. At knots	1750 in Pan	CST, wind tex, in	l asso the e	ciate extrem	e out numerous d with the same se western part of	Salt Lake City Summit County, Kamas	23	1330MST			0	0	1	0	Wind Hail(1.00)
	the county.	The ha	ail fel	l for	about 90	minu	ites a	nd ruined much of	Sevier County, Elsinor	21	1350MST			0	0	1	0	Thunderstorm

PLACE	DATE	TIME - LOCAL STANDARD	LENGTH OF PATH (MILES)	WIDTH OF PATH (YARDS)		SONS OF	PROPERTY WWD		CHARACTER OF STORM	PLACE	DATE	TIME - LOCAL STANDARD	LENGTH OF PATH (MILES)	WIDTH OF PATH (YARDS)	KILLED KILLED	SONS	TAMATO LE LA		CHARACTER OF STORM
UTAH Salt Lake County,	21	1400MST						0	Hail		NT  20	evening	•		0	0	4	3 1	hunderstorm Wind
Kearns Salt Lake County, Kearns Wasatch County, Bench Creek Utah County, Provo and Orem Salt Lake County, Cottonwood Canyons and Sandy San Pete County, Gunnison and Centerfield San Pete County, Fairview	21 21 21 A vii Uteh squai heav: In Vi composition of pears to windoll of windoll of close Univ.	on this 1 11 line y rain and y rain and our annies foo ars. The the way s, and per automobile ows. One en at Brig alt Lake ( though single systematics, it ars worth ed due erraity of 11 Engin 1 Engin	Fuesday which d high hty, a r crop county throug aches a es and estima gham Yo  County, trong wem of t and th of dan tto hig Utah, eering	. The batter winds. cumul s and tart ch, and lso sus build te income United to the Hebote build age. It was several Build:	from from the from th	e dame e dame e dame e ty y harve ed a gr was : ed the ity.  ppeare Wells sustra etrees cross ldings Utal	accopf the age e added est wa the c reat d also s at ab d to b il wer Build ained s and the were h Pow	0 0 0 0 0 th cen mpani- stima lup t: ss onl; ss onl; the eals ting w appr inter: entir flood er al	Thunderstorm Wind Hail (1.00) Hail (1.00) Flash Flood Hail (1.75) Hail (1.00) tral and northern ed by a damaging with large hail, te by insurance o several million y about one third as lost. Apples, f damage. Damage with many broken eso windows were biggest problem, o occurring. The as overpowered by oximately \$30,000 sections were e valley. At the ed, including the nd Light Company ower for a short	Windham County Addison County: New Haven Shoreham  Addison County Chittenden County Orange County Washinton County	Verithe house light fire fire val. the 25 25 25 Coor 30 30 30 30 30 30 30 30 30	21st. In sing projections, In the min an age in a too. efighters they Road w. county as 1525EST 1700EST 1700EST	accompert on Montpy or to Montpy or to Montpy or to R. R. or nearly artmer or to Montpy or to Mo	Monday elier, addo st. ddo st. by Barret complift st. or route but. M.	night, a mud sation was attion we city, lex. A attion was to the any other of the city of	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	555 565 57 57 58 58 58 58 58 58 58 58 58 58 58 58 58	0 I o o o o o o o o o o o o o o o o o o	tud Slide  **liash Flood .ightning .
	doll the blow	icularly ( ars" and windows of n into the cars was	nasty t strong ut of t he car,	hunders gusts welve o while	storm. desti cars. some	Hai royed o The north	lstone a ten- car g facin	s the year- lass g gla	ille was hit by a size of "silver old barn and blew facing south was so in some of the own as far as 150	44 VIRGINIA Waynesboro Augusta County	A to dia at of and	ameter, c	orm d ausin mill dama ed ga njure as he	g exterion. ged cardens. d when	The hars, h	e dama ail b ouses 1 ck by	ge th roke , and 0 ligh	two at w a la tra 0 atnin	Hail (2.00) inches in as estimated rge number ffic lights, Lightning g near Thunderstorm
43 VERMONT Caledonia County: West Barnet West Burke	14	1422EST 1435EST			0	0	5	0	Thunderstorm Wind	Culpeper, Culpeper County	A go	thunderst lfball si	orm a	il to	nied	by st	rong tree	wind s an	Wind and Hail (1.75)
Waterford Addison County, Middlebury Essex County, Lunenburg	14 14 Summe	1735EST 1500EST 1800EST er thunder in north			0 0 0 nigh w	0 0 0 sinds k	4 5 5 mocke	0	Thunderstorm Wind Thunderstorm Wind Thunderstorm Wind In trees and power	Dickenson, Buchanan, and Washington Counties	He. Ru ca	ssell For using eva	assoc k Riv cuati	er 4 ons and	to 6 i nd cor ne mos	eet a sider st dam	bove able age v	floc dama	n Dickenson
Windsor County	Raini resul	lt was sev	vere ro stock.	ad wash	iouts	in the	town	o hour	Flash Flood rs occurred. The North Bridgewater re reported in the	Loudoun and Fairfax Countie	A A CO	pilot rep	ade a	or polithe	tornac I. Th	ly 3 t io alo nere w	ng th as da	downs ne Fa nmage	Tornado (F1) near Arcola irfax-Loudous to crops and rted.
Orange County Windsor County Washington County Orleans County	18 18 18 18 A lawhich the cased femal	h resulted cause of t cond accid	in a the acc dent oc where, /T)	fatal o ident a curred	ar cr is wea nearb	rash. Ather 1 Dy. Th	Políc relate nis ac	e inve d. A ciden	Thunderstorn Wind Thunderstorn Wind Thunderstorn Wind Thunderstorn Wind Thunderstorn Wind Thunderstorn Wind Thunderstorn Wind thunderstorn Wind d visibility estigators listed short time later, t injured two blown down.	Franklin County Page County	Stas in hor 13 Foas Sh	sociated Rocky Mo me. Medi 1400EST ur men, a they hud	ne wi with ount, oum ar siged l	a gustinclud d lard	t from	nt cau a roof ne tre  4 ars, w noe ne	sed s blow es we 4 ere i	to 75 scatt vn of ere u 0 injur tree	Thunderstorm Wind imph and ered damage ff a mobile uprooted. Lightning red by lightnicalong the a fire at a

		JULY 196
PLACE	TIME - LOCAL STANDARD LENGTH OF PATH (MILES) WIDTH OF PATH (MILES) WIDTH OF PATH (MILES) WASHED CROPS	PATE  TIME - LOCAL STANDARD STANDARD STANDARD STANDARD STANDARD STANDARD OF BESTIWATED OF BESTIWATED OF BESTIWATED OF STANDARD
VIRGINI	A	WASHINGTON
Entire State	Temperatures climbed well into the 90's (°F) for 9 to 14 consecutive days, occasionally rising over 100°F. Mountain sections were also in the 90's. Richmond had its second hottest July on record, and Norfolk its fourth. VEPCO reported record-level usage of near 11.5 million kilowats on the 21st. Minor heatrelated medical problems were reported. Agriculture suffered the most from the heat and lack of rain in areas near the Virginia-North Carolina border. Chicken losses on the Delmarva Peninsula approached one million, which was somewhat above normal.	North-Central and Northeastern Washington  A cloudburst accompanying an afternoon thunderstorm caused mudslides over roads and substantially damaged a pair of roads south of Bridgeport, 50 miles north-northeast of Wenatchee. Cost of repairs was estimated at \$100,000. In Colville, 35 small fires caused by lightning strikes were reported. The largest fire covered about 10 acres.
Manassas Airport Prince William County	21 1905EST 0.25 50 0 0 6 0 Tornado (F0) A tornado skipped across Manassas Airport, making contact with the ground 3 times. Damaged were 55 planes, 20 of which were flipped over. Three large hangar doors were twisted off assembly rails, and concrete chunks from off-ramp aprons were ripped up.  22 1755EST 0 0 4 0 Thunderstorm	46 WEST VIRGINIA  WYZO11 Jefferson County, 10 SF Summit Point Heavy thunderstorms produced golf ball size hail, and strong winds that destroyed a 60 x 120 foot warehouse. Witnesses observed a
County	Wind Strong winds associated with thunderstorms knocked over several large trees. The winds ripped a tin roof off of an old house near Lafayette, blowing it 50 yards.	funnel cloud.  WVZO11
Pittsylvania County	23 1400EST 0 0 0 4 Hail (1.75) Golfball size hail in the Dry Fork area caused wide- spread damage to tobacco crops.	Many roads were closed, buildings were flooded, and the Bolivar-Harpers Ferry water treatment plant was vashed out of service.  WVZ010
Powhatan County	26 1600EST 2.0 100 0 0 ? 0 Tornado (FG) A small tornado skipped along tree tops about 5 miles northwest of Powhatan. Several large oak and hickory trees were twisted off:10 to 15 feet above the ground. Numerous other trees were blown over or damaged. No structural damage or injuries were reported.	trees, knocking down power lines and causing several outages in the Petersburg area.  WZ2005-007 Braxton County and Webster County Webster County
Roanoke County	30 1400EST 0 0 ? 0 Hail (1.75) Golfball size hail fell in Salem. The associated thunderstorm also caused frequent power outages.	Guardian in Webster County.  WYZ004 26 1445EST 0 0 0 ? Thunderstorm Wind Putnam County Several large trees were downed along State Route 34 near Red
Virginia Beach and Chesapeake	31 1700EST 0 0 5 0 Thunderstorm Wind A line of strong thunderstorms moved into the area, blowing over several large trees. In Virginia Beach, part of an open-air supermarket facade was blown off and house siding damage occurred. In Chesapeake, lightning caused power outages and wiped out police radio communications. As much as 2.63 inches of rain was reported with local flooding.	WVZ007 Nicholas County, 2 N Summersville A National Weather Service employee reported that, during a thunderstorm, 3/4 inch hail fell and large tree limbs were downed by winds on State Route 19, north of Summersville.
45 WASHINGTO	N .	47 WISCONSIN
Chelan and Whitman Counties	18 1730 PST 0 0 5 0 Flash Flood Separate thunderstorms developed at approximately the same time over the town of Wenatchee and near the town of Colfax, 50 miles south of Spokane. The Wenatchee storm had heaviest rainfall over the downtown business area, with a spotter reporting 1.03 in. of rain in a half hour period. Flooding of basements and buildings resulted, and clogged culverts caused flooding of some roads and parking lots. The Colfax storm dumped 1 to 2 inches of rain over the area in an hour and a half period, causing mudslides which temporarily closed some secondary roads.	Phillips, Price Co.  02 1325- 0 1 5 0 Thunderstorm 1340CST 02 1325CST 0 0 3 4 Hail (1.75) A severe thunderstorm generated downburst winds and hail up to the size of golfballs as it struck the Phillips area. Winds gusting to 68 mph flipped over a plane at the Price County Airport, sheared the roof from a home, leveled a garage, shifted several trailer homes from their foundations and destroyed 15 concrete statuse in a park. A woman was injured when cut by flying glass as windows in her home were
King County	18 1900 PST 0 0 4 0 Lightning Thunderstorm activity over the Kent Valley area 15 miles south-south- east of Seattle produced lightning which struck a house. The roof and gutter sustained damage and 3 TV sets, a VCR, and stereo were blown out by the elecrical surge of the lightning strike.	shattered. The wind-driven hail destroyed many crops and damaged several cars. In all, over \$350,000 in damage took place.  Medford, 02 1540CST 0 0 3 0 Thunderstorm Taylor Co. Wind
Okanogan and Grant Counties	22 1400 PST 0 0 0 0 Lightning Lightning strikes from an afternoon thunderstorm touched off about 20 small range and forest fires and one house fire. Fires were spread from the Grand Coulee area eastward to the Colville Indian Reservation in Northeast Washington. The largest fire was a 20-acre blaze. Damage in the house fire was limited to an electrical panel. At the Grand Coulee Dam, winds uprooted a 20 foot Pine tree in a park.	Intense thurderstorm winds caused several large trees to fall, one of which landed on a home 2 miles northeast of Nedford.  Merrill, 02 1548CST 0 0 ? 0 Thurderstorm Wind Several large trees were toppled by strong thurderstorm winds 1 mile north of Merrill.
Southeast Washington	25 0500 PST 0 0 5 0 Heavy Rain, Small Hail A morning rain and hail storm swept over the southeastern corner of the state, with many farmers reporting damage to crops due to the hail. Damage was widely scattered over a 6 county area, with portions of some fields sustaining serious damage while the remaining areas were unaffected.	Athens, Marathon Co.  02 1558CST 0 0 ? 0 Thunderstorm Wind Violent thunderstorm winds blew down several trees measuring 6 to 12 inches in diameter 2 miles south of Athens.

	NO. OF ESTIMATED		NO. OF ESTIMATED! DAMAGE
PLACE	TIME - LOCAL  STANDA - LOCAL	PLACE	TIME - LOCAL STANDARD
WISCON	SIN	WISCON	SIN
Wausau, Marathon Co.	02 1630- 0 0 4 0 Thunderstorm l635CST Wind (54) A severe thunderstorm generated winds to 62 mph at the Wausau Airport. Power lines and several large trees, one of which crushed a car, were felled. Over	Mosinee, Marathon Co.	11 1225CST 0 0 ? 0 Thunderstorm Winds gusting to 75 mph from a severe thunderstorm near Mosinee blew down several trees.
Union Center, Juneau Co.	6,000 homes were without power.  02 1635CST 0 0 0 ? Hail (1.75)  Bail up to the size of golfballs fell from a severe thunderstorm at Union Center.	Antigo and Bryant, Langlade Co.	11 1305- 0 0 4 0 Thunderstorm Wind A severe thunderstorm felled several large trees and power poles and knocked over a 12 by 12 foot shed with strong winds in and a few miles east of Antigo. The same storm leveled some trees, one of which crushed a pickup truck in Bryant.
Sauk County: Reedsburg Reedsburg Baraboo	02 1700CST 0 0 0 0 Furnel Cloud 02 1700CST 0 0 0 ? Hail (1.75) 02 1720CST 0 0 0 ? Thunderstorm	Crandon, Forest Co.	11 1330CST 0 0 ? 0 Thunderstorm Wind Several trees and a few power poles were toppled by a severe thunderstorm east of Crandon.
	A severe thunderstorm generated hail up to golfball size and a funnel cloud at Reedsburg. The storm's winds then knocked down several large trees and power lines in Baraboo.	Fence, Florence Co.	11 1345CST 0 0 ? 0 Thunderstorm Wind Intense winds from a severe thunderstorm caused damage
Pike Lake, Marathon Co.	02 1710- 0.2 75 0 0 5 0 Tornado (F1) 1715CST A tornado caused over \$50,000 damage just east of Pike	Birnamwood, Bowler, and Shawano; Shawano Co.	to several power lines and large trees near Fence.  11 1330- 0 0 4 0 Thunderstorm Wind (70)
Spring Green,	Lake. Numerous trees were twisted and knocked down causing damage to 7 homes, 1 boat foundation and a boat trailer.  02 1755CST 0 0 0 ? Thunderstorm	Siewein Co.	Winds gusting up to 80 mph from a severe thunderstorm toppled many trees and power lines from Birnzmwood to Bowler to Shawano.
Sauk Co.	Strong winds from a severe thurderstorm downed power lines and a few large trees at Spring Green.	Klondike, Oconto Co.	11 1345CST 0 0 5 0 Thunderstorm Wind Violent thunderstorm winds leveled a 50 foot barn, killing 14 head of cattle 5 miles west of Klondike.
Boardman, St. Croix Co.	06 1508CST 0.1 25 0 0 0 ? Tornado (FO) A small tornado touched down briefly 1 mile southeast of Eoardman, heavily damaging 12 trees.	Pound, Peshtigo, and Marinette; Marinette Co.	11 1350- 0 0 5 0 Thunderstorm 1410CST Wind (70)  Thurderstorm & Swind winds gusting to 80 mph
Willow River State Park, St. Croix Co.	06 1527CST 0 0 0 ? Thunderstorm Wind  A severe thunderstorm uprooted trees 9 to 12 inches in diameter at Willow River State Park.		carved a 20 mile path of destruction from Pound to Marinette. In Pound, \$55,000 damage took place when a large factory roof was ripped away, an overhead door wrecked, and numerous trees downed. Near Peshtigo, numerous large trees and a 69,000 volt transmission
Oconomowoc, Vaukesha Co	06 1550- 0 0 4 0 Thunderstorm 1600CST Wind A severe thunderstorm downed trees and power lines, turned over boats, and damaged piers along Okauchee Lake. Trees were also leveled in Oconomovoc.	Howard and Green Bay,	line were toppled. In Marinette, several roofs were damaged, a scoreboard was twisted into scrap metal, and numerous trees were uprooted or split.  11 1400CST 0 44 5 ? Thunderstorm Wind
Pewaukee, Naukesha Co.	06 1605- 0.3 100 0 0 6 0 Tornado (F1) 1610CST 06 1620CST 0 0 0 7 Hail (0.75)  A tornado set down just northeast of downtown Pewaukee. About \$800,000 in damage to a 3 block area occurred. Sixteen	Brown Co.	Strong winds from a severe thurderstorm collapsed a 274 by 134 foot circus tent containing 1200 people in Howard. 43 people received minor injuries and 1 man was treated for a broken leg. Demage to the tent was \$75,000. The winds also downed trees and power lines from Green Bay to Dyckesville.
	house and garages and 5 buildings were severely damaged. The roof of the village's public works building was ripped in half. Several vehicles, power lines and numerous trees, some 75 feet tall, were destroyed. Hail up to 3/4 inch in diameter accompanying the stoum fell in Meronomoee Falls.	Luxemburg, Kewaunee Co	11 1445CST 0 0 3 0 Thunderstorm Wind  Intense thunderstorm winds blew a boat off a trailer into a ditch, overturned chopper wagons, lifted a sile roof, and blew some roofing materials off a high school near Luxemburg.
dilwaukee, Gilwaukee Co.	06 1615- 0 0 5 ? Hail (2.00) 1635CST 06 1615- 0 0 5 ? Thunderstorm 1640CST Wind	Wisconsin Rapids, Wood Co.	11 2000CST 0 0 ? 0 Thunderstorm Wind A severe thunderstorm uprooted trees with very strong winds in and just east of Wisconsin Rapids.
	A severe thunderstorm swept through the northern half of Milwaukee County dropping half up to 2 inches in diameter that caused extensive damage to many cars, especially at auto dealerships. Intense winds knocked down numerous trees, some crushing cars. Power lines were downed, affecting 15,000 homes.	Prairie du Chien, Crawford Co.	11 2045CST 0 0 4 0 Thunderstorm Wind Strong thunderstorm winds lifted the roof of a home and carried it 100 yards into another home in Prairie du Chien. Damage was \$45,000.
Stoughton, Nane Co.	06 1700CST 0 0 ? ? Thunderstorm Wind A severe thunderstorm blew down trees and several power lines in Stoughton.	Francis Creek, Manitowoc Co.	12 1127- 0.2 75 0 0 5 0 Tornado (F1) 1130CST A tornado briefly touched down 1 mile south of Francis Creek, destroying a house and garage as well as damaging a barn, a shed and several trees. Over \$50,000 in
ew Lisbon, uneau Co.	07 1552CST 0 0 0 0 Furnel Cloud A furnel cloud was sighted 1 mile west of New Lisbon.	Milwaukee,	damage occurred and debris from the house was found as far as several miles away.  12 1130CST 0 0 4 0 Thurderstoom
Tittenburg, Shawano Co.	09 0040CST 0 0 ? Thunderstorm Wind  Intense winds from a severe thunderstorm sheared the tops off several large trees 1 mile north of Wittenburg.	Milwaukee Co.	A severe thunderstorm toppled several large trees on the east side of Milwaukee. One tree landed on the front end of a car, lifting the rear wheels into the air.
Baileys Harbor, Door Co.	10 1230CST 0 0 2 ? Thunderstorm Wind A severe thunderstorm with strong winds uprooted large trees and broke windows of a motel at Balleys Harbor.	Lake Michigan, Milwaukee Co.	12 1150CST 0 0 0 0 Waterspouts Two waterspouts were observed over Lake Michigan 2 miles east of Milwaukee.
Centuria, Polk Co.	11 0730CST 0 0 3 0 Thunderstorm Wind A large garage had half its roof pulled off and some of the siding buckled from strong thunderstorm winds at Centuria.	Bashaw, Burnett Co.	20 0820CST 0.1 25 0 0 4 ? Tornado (F0) A small tornado set down briefly on a farm 6 miles south of Bashaw. It took off the top of a silo, threw a chopper wagon 40 yards into the air, uprooted trees and lifted the topper off a truck.

			JULY 198
PLACE	TIME - LOCAL STANDARD STANDARD STANDARD STANDARD STANDARD STANDARD CROP'S CROP'	PLACE	TIME - LOCAL STANDARD
WISCON	SIN	WISCON	SIN
Rice Lake, Barron, and Chetek; Barron Co.	20 0842- 0 0 5 ? Thunderstorm Wind (52) Severe thunderstorm winds gusting to 60 mph at the Rice Lake Airport caused scattered damage to several	Stevens Point to Anherst, Portage Co.	20 1240- 0 0 ? ? Thunderstorm 1250CST Wind  Numerous trees and power lines were leveled by severe thunderstorm winds from Stevens Point to Amherst.
·	locations throughout the county. A shed, barn, and swingset were damaged 5 miles north of Rice Lake, several large trees were toppled in Barron, and a barn roof was torn off 2 miles west of Rice Lake. Other large trees and power lines were knocked down in Chetek. Many cornfields were also leveled.	Suring and Gillette, Oconto Co.	20 1242CST 0 0 ? ? Hail (1.75) 20 1242- 0 0 ? ? Thunderstorm 1253CST Wind (60) A severe thunderstorm packing winds to 69 mph toppied trees and power lines between Suring and Gillette and dumped hail up to 901fball size.
Bruce, Rusk Co.	20 0930CST 0 0 ? ? Thunderstorm Wind Powerful winds from a severe thunderstorm knocked down power lines and 14 trees just west of Bruce.	Peshtigo, Oconto Co.	20 1255CST 0 0 ? 0 Thunderstorm Wind  Several large trees were uprooted in Peshtigo by severe thunderstorm winds.
Medford, Taylor Co.	20 1045CST 0 0 3 0 Thunderstorm Wind Violent thunderstorm winds blew the roof off a barn and leveled large trees 1 mile west of Medford.	Weyauwega, Waupaca Co.	20 1300CST 0 0 ? 0 Thunderstorm Wind Large trees and power lines were toppled by a severe thunderstorm in Weyauwega.
Minocqua and Three Lakes, Oneida Co.	20 1040- 0 0 3 0 Thunderstorm Wind 1100ST A severe thunderstorm with very strong winds downed trees and power lines, shattered a plate glass door, and blew down signs in Minocqua. The winds also knocked down power lines in Three Lakes.	Schiocton and New London, Outagamie Co.	20 1300- 0 0 4 0 Thunderstorm 1310CST Wind Intense thunderstorm winds leveled a 40 by 80 foot barn and damaged several pieces of farm equipment near Schiocton. Trees and power lines were knocked down from Schiocton to New London.
Eagle River, Vilas Co.	20 1100CST 0 0 ? 0 Thunderstorm Wind A severe thunderstorm generated winds which leveled several trees and power lines near Eagle River.	Appleton, Kaukauna, and Little Chute; Outagamie Co.	20 1305- 0 1 ? Thunderstorm Wind (50) A severe thunderstorm producing winds to 58 mph at the
Merrill, Lincoln Co.	20		Outagamie County Airport also knocked down numerous trees and power lines in Kaukauna. One large tree landed on a car, slightly injuring a small girl. The winds also ripped the air raid siren off the roof of the Little Chute village hall.  20 1305CST 0 0 4 0 Thunderstorm
	damage from the Council Grounds State Park to 5 miles east of Merrill. The storm downed many trees. At the Lincoln County Fairgrounds east of Merrill, a grandstand roof was ripped away. Several trees were uprooted, some of which fell on some mobile homes.	DePere, Brown Co.	Violent thunderstorm winds moved a steel silo from its foundation, ripped pieces from a barn and tossed them over a quarter of a mile, and pushed a truck backwards over 100 feet, 6 miles south of DePere.
Edgar and Marathon City, Marathon Co.	20 1125CST 0 0 ? ? Thunderstorm Wind (52) Winds gusting up to 60 mph in Marathon City from a severe thunderstorm downed trees and power lines. A barn near Edgar collapsed from the intense winds, killing 6 cows.  20 113CST 0 0 4 0 Thunderstorm	Sister Bay, Door Co.	20 1310CST 0 0 4 ? Thunderstorm Wind (61) A severe thunderstorm generated winds to 70 mph and caused damage to portions of Door County. The winds set a pier loose with several boats landing upon the rocks along Sister Bay. Several large trees and power lines were also toppled.
Seymour, Outagamie Co.	20 1130CST 0 0 4 0 Thunderstorm Wind Several large trees, some up to 2 feet in diameter, were toppled by severe thunderstorm Winds in Seymour. One tree fell on a car and another landed against a building.	Butte des Morts and Oshkosh, Winnebago Co.	20 1330- 0 0 ? ? Thunderstorm 1340CST Wind  Strong winds from a severe thunderstorm caused heavy tree and power line damage in the Butte des Morts and
Antigo, Langlade Co.	20 1135—1145CST Intense downburst winds from a severe thunderstorm Wind Intense downburst winds from a severe thunderstorm carved a damage path along Highway 64 from the town of Ackley to Antigo. About \$242,000 in damage took place as the winds ripped apart a mobile home with a large part of it landing in the Eau Claire River seven hundred yards away. A 1,000 gallon IP tank ruptured and a factory was badly damaged. Numerous trees were	Valders, Manitowoc Co.  Brillion and Chilton,	Oshkosh areas.  20 1400CST 0 0 3 0 Thunderstorm Wind  Very intense thunderstorm winds flipped over and destroyed a camper, tore down several trees, bent a TV antenna and caused roof damage to a residence in Valders.  20 1400- 0 0 4 0 Thunderstorm
Mosinee,	uprocted and power lines knocked down. 2 barn silos and the Langlade courthouse roof were damaged. Some oat and corn crops were flattened.  20 1142CST 0 0 ? ? Thunderstorm Wind (70)	Calumet Co.	1410CST Wind A severe thunderstorm with very intense winds caused a shed to become twisted upon a tree and a garage wall to be blown out in Brillion. In addition, numerous trees were toppled from Brillion to Chilton.
Marathon Co. Florence,	A severe thunderstorm packing winds to 87 mph was reported at the Central Wisconsin Airport in Mosinee.  20 1145CST 0 0 3 0 Thunderstorm	Dexterville and Wisconsin Rapids, Wood Co.	20 1440- 0 0 4 ? Thunderstorm 1450CST Wind (56) Winds gusting as high as 65 mph from a severe
Florence Co.  Birnamwood and Gresham, Shawano Co.	Winds gusting up to 60 mph downed several large trees, one of which landed on a car, in Florence.  20 1200- 0 0 4 0 Thurderstorm Wind A barn and silo were blown away by strong winds from a	-	thunderstorm produced scattered damage throughout southern Wood County. Near Dexterville,8 to 10 inch diameter trees were blown over. Trees, antennae, including a 30 foot antenna tower, power lines, and a camper were blown over in Wisconsin Rapids. A huge tree fell in a house and a topper from a truck blew into some trees, also in Wisconsin Rapids.
Marion, Embarrass,	severe thurderstorm I mile north of Birnamwood. The same storm uprooted several trees and tore down power lines around Gresham.  20 1230- 0 0 3 ? Thunderstorm	Adams and Monroe Center, Adams Co.	20 1445- 0 0 ? Thunderstorm Mind A severe thunderstorm producing intense winds knocked down large trees near Adams and Monroe Center.
and Clintcoville; Waupaca Co.	1245CST Wind (52)  Severe thunderstorm winds gusting to 60 mph caused many trees and power lines to be knocked over in the Murion, Embarrass, and Clintonville areas. Roofing was peeled back from a barn 1 mile northwest of Embarrass.	Necedah and Mauston, Juneau Co.	20 1448- 0 0 4 ? Thunderstorm 1455CST Wind (56) High winds gusting to 64 mph at Necedah from a severe thunderstorm toppled trees, peeled a roof back at a shopping center and service station and leveled a barn in Mauston.

PLACE	TIME - LOCAL STANDARD LENGTH OF PATH (TAROS) WIDTH OF PATH (TAROS) RILLED ROPERTY CROPS CR	PLACE	TIME - LOCAL STANDARD LENGTH OF PATH (VARDS) MIDTH OF PATH (VARDS) MIDTH OF PATH (VARDS) MILLED MIDTH OF PATH (VARDS) MILLED MIDTH OF PATH (VARDS) MILLED MOOPERTY CROPS
WISCON	SIN	WISCON	ISIN
Baraboo, Sauk Co.	20 1602CST 0 0 ? ? Thunderstorm Wind Several large trees were felled by severe thunderstorm winds in Baraboo.	Elkhart Lake, Sheboygan Co.	A tornado ripped through a rural area just north of Elkhart Lake, leveling a 45 by 120 foot barn, damaging a house as its chimney collapsed, destroying 3 sheds, and
Randolph, Dodge Co.	20 1603CST 0 0 ? ? Thunderstorm Wind (52) A severe thunderstorm generated winds up to 60 mph in the Randolph area and blew some windows out of a house.		uprooting and twisting numerous trees. In the barn, 2 bale elevators, a side rake, quack digger, 2 wagons, and a camper were crushed. Neighboring houses sustained roof, antenna, and granary damage. An apple tree was twisted off its base and carried 260 feet. In addition, numerous power lines were knocked down.
Mazomanie and Stoughton, Dane Co.	20 1644- 0 0 ? ? Thurderstorm 165CST Wind Several large trees and power lines were blown over by severe thunderstorm winds in Mazcmanie and Stoughton.	Prescott, Pierce Co.	27 0230CST 0 0 4 ? Thunderstorm Winds (61) A severe thunderstorm packing winds up to 70 mph hit the Prescott area. Trees were knocked down and a 40
Chenequa and Delafield, Waukesha Co.	20 1715- 0 1 ? ? Thurderstorm Wind 1725CST Wiolent thunderstorm winds caused a 16 inch limb of a large tree to land on a van, slightly injuring its driver near Chemequa. Several large trees and power lines were downed in the Delafield and Nashota areas.	Durand, Pepin Co.	foot boat slip was picked up out of the water and placed on top of another.  27 1400- 0 0 4 ? Thunderstorm H10CST POWETFUL Winds from a severe thunderstorm struck a rural area 5 to 10 miles east of Durand. A machine
Janesville and Clinton, Rock Co.	20 1748- 0 0 ? ? Thunderstorm 1800CST Wind (60) A severe thunderstorm packing winds to 69 mph at the Janesville Airport felled large trees and power lines from Janesville to Clinton.		shed was ripped from its foundation and carried into a nearby cornfield. A storage shed was moved 2 feet off its foundation, several chopper wagons were knocked over and power lines were downed.
Prescott, Pierce Co.	20 2000CST 0 0 4 0 Thunderstorm Wind Gusty winds from a severe thunderstorm blew down many trees as well as a shed in Prescott.	Meridean and Rock Falls, Dunn Co.	27 1405CST 0 0 ? ? Thunderstorm Wind Several large trees and power lines were toppled by severe thunderstorm winds between Meridean and Rock Falls.
Whitehall, Trempealeau Co.	21 0005CST 0 0 5 4 Lightning Lightning struck a 140 by 36 foot barn near Whitehall and the resulting fire destroyed the barn, 17,000 bales of hay, an adjoining shed and a manure spreader.	Green Lake, Green Lake Co.	29 1245CST 0 0 ? ? Thunderstorm  Several power poles and lines were felled by severe thunderstorm winds in the Green Lake area.  29 1308- 0 0 5 ? Thunderstorm
Richwood, bodge Co.	21 1809CST 0.1 25 0 0 3 0 Tornado (FO) 21 1809- 0 0 ?  Hail (1.75) 1815CST A small tornado touched down on County Trunk K at Walton Road 1 mile north of Richwood, pulling a door from a house, causing roof and window damage and uprocting a pair of 30-inch diameter trees. The accompanying storm dropped hail up to golfball size.	Ripon and Fond du Lac, Fond du Lac Co.	29 1308- 0 0 5 7 Trunnerstorm 313CST wind (52) A severe thunderstorm generated intense wind up to 60 mph which uprooted trees, downed power lines, destroyed several sheds and ripped the skirting off 4 trailer homes in Ripon. In Fond au Lac, the winds blew an airplane across the airport field, leveled trees, and lifted an 8,000 gallon fuel tark and smashed it into a building. Some trees were knocked onto homes, causing minor damage.
Samerset to New Richmond, St. Croix Co.	1330CST 23 1310- 0 0 ? ? Hail (1.00) 1330CST 23 1310- 0 0 6 ? Thunderstorm wind (70) Extremely violent thunderstorm downburst winds up to 80 mph and hail up to 1 inch in diameter carved a path of destruction from Somerset to New Richmool. In Somerset, over 300 large trees were flattened, numerous	West Bend and Jackson, Washington Co.	29 1335CST 0 0 0 0 Punnel Cloud 29 1357- 0 0 2 ? Thunderstorm 1406CST Wind (61) A funnel cloud was sighted just north of West Bend. Violent thunderstorm winds gusting to 70 mph caused large trees and power lines to fall from West Bend to Jackson.
	power lines knocked down, a mobile home overturmed, and several garages and barns flattened. Several homes were demaged and vehicles were crushed by the trees and collepsed garages. A four stall garage was blown across a street, a few walls and chimneys were also damaged. In New Richmond, numerous falling trees and power lines were noted. A large metal shed containing styrofoam, lumber and insulation was leveled, leaving strips of the shed hanging on power lines. Barn and roof damage was extensive and large plate windows were shattered at an auto dealer. Bleachers at a ball park were also destroyed.	Grafton, Saukville, and Oedarburg; Ozaukee Co.	29 1355CST 0 0 0 0 0 Funnel Cloud 29 1355- 0 0 4 2 Thunderstorm 1415CST Wind (52) A severe thunderstorm with winds gusting to 60 mph produced scattered damage to trees and power lines in Saukville and Cedarburg. More extensive damage took place in Grafton where numerous large trees, one with a circumference of 13 feet 7 inches, were toppled. Some trees damaged 3 homes and 3 vehicles. In Saukville, windows were broken and shingles were blown off roofs of homes. A funnel cloud was spotted over Saukville.
Bloomer, Cornell, and Stanley; Chippewa Co.	23 1420- 0 0 4 ? Thunderstorm 1515CST Wind  Intense severe thunderstorm winds knocked down trees and power lines in Bloomer and Stanley. Just northeast of Cornell, the winds tore a foundation out of a barn, blew out windows of 2 houses, uprooted huge trees and ripped the roof of a mobile home.	Fox Point and Milwaukee, Milwaukee Co.  Elkhart Lake,	29 1408- 0 0 ? ? Thunderstorm Wind (52)  1438CST
Baldwin, St. Croix Co.	25 2302CST 0 0 ? ? Hail (2.75) Hail up to the size of baseballs fell from a severe thunderstorm just north of Baldwin.	Sheboygan Co.	1415CST Wind A severe thunderstorm knocked down trees and electrical wires, tore siding from a house and demaged a granary and farm equipment worth \$40,000; 1.5 miles northwest of Elkhart Lake.
Friendship, Adams Co.	25 2304CST 0 0 4 0 Thunderstorm Wind Gusty severe thunderstorm winds tore a 40-foot-wide 200-foot-long roof off the grandstand at the Adams County Fairgrounds. In addition, several large trees and power lines were knocked down.	Pewaukee, Town of Lisbon, and Sussex; Waukesha Co.	29 1430CST 0 0 0 0 Funnel Cloud 29 1430- 0 0 3 7 Thunderstorm 1442CST Thunderstorm winds up to 75 mph blew a porch off a house in Pewaukee and destroyed 2 sheds in the Town of Lisbon. A funnel cloud was noted over Sussex.
		Racine, Racine Co.	29 1510CST 0 0 4 ? Thunderstorm Wind (52)  Intense thunderstorm winds gusting to 60 mph caused several large trees and power lines to fall. Some of the fallen trees caused minor property damage in the city of Racine.

			JULY 1
PLACE	TO OF ESTIMATED DAMAGE  TO OF ESTIMATED DAMAGE  TO OF ESTIMATED DAMAGE  CHARACTER OF OF OF	PLACE	DAMAGE  OF ESTIMATED DAMAGE  OF DESTIMATED DAMAGE  OF DESTIMATED D
FLACE	TIME - LOCAL STANDARD - LOCAL STANDARD - LOCAL STANDARD - LOCAL STANDARD - LOCAL - LOC	PLACE	TTME - LOCAL STANDARD LENGTH OF PATH (TAROS) NUDTH OF PATH (TAROS) NUDTH OF PATH (TAROS) NUDTH OF PATH (TAROS) DECOMPS OF THE
WISCON	5IN	WYOMIN	IG
Westby, Vernon Co.	29 1520CST 0 0 4 ? Thurderstorm Wind	Platte County: 7S Wheatland	07 1310MST 0 0 ? ? Hail (1.75)
Veriali Co.	A severe thunderstorm with very strong winds destroyed a 108 foot tobacco barm near Westby. A number of trees	12S Wheatland	07 1320MST 0 0 0 0 4 Funnel clouds
	were also downed between Westby and Cashton.	8SE Wheatland	07 1400MST 0 0 ? ? Hail (1.25)
Mount Horeb, Dane Co.	29 1630CST 0 0 5 0 Thunderstorm Wind A severe thunderstorm with very strong winds demolished a barn near Mount Horeb.	Goshen County, 15S Yoder	07 1600MST 0 0 0 Thunderstorm
Beloit and Jamesville, Rock Co.	29 1650- 0 0 5 ? Thunderstorm 1710CST Wind (90) Violent severe thunderstorm winds measuring up to 104 mph at the Rock County Airport in Janesville damaged \$100,000 worth of planes, two of which were flipped over, two smashed into a sign and one blown 300 yards down the main runway. Numerous trees were knocked down		A line of severe thunderstorms developed along the Laramie Mountains after 1300MST and moved eastward. A few of those thunderstorms dropped one to one and three-quarter inch diameter hall south of wheatland. Motorists driving on Interstate 25 between northern Laramie County and Wheatland in Goshen County reported four funnel clouds. At 1600MST telephone poles were knocked down south of Yoder.
	in the area. In Beloit, trees and power lines were blown down.	Laramie County: Hillsdale	07 1645MST 0 0 0 ? Hail (.75)
Richland Center,	29 1705- 0 0 5 0 Thunderstorm	4SE Cheyenne	07 1655MST 0 0 0 ? Hail (.75)
Richland Co.	1715CST Wind Numerous power lines and several large trees were	15 Cheyenne	07 1700MST 0 0 0 ? Hail (.50)
	toppled by severe thunderstorm winds around Richland Center. A barn was also partially destroyed 5 miles west of Richland Center.		Severe thunderstorms moved through Laramie County and deposited hail ranging from one-half inch to three-quarters of an inch in diameter.
Spokeville, Clark Co.	29 1710- 0 0 4 ? Thunderstorm 1720CST Wind	Laramie Co, Albin	07 1705MST 0 0 0 3 Hail (.50)
	Severe thunderstorm winds caused several trees and power lines to fall around the Spokeville area. One	Goshen Co, Yoder	07 1712MST 0 0 0 3 Hail (.50)
Lime Ridge and Lake Redstone,	tree landed on a house, causing minor damage. 29 1715- 0 0 4 ? Thunderstorm Wind (56)		Strong thunderstorms from south Platte County moved through sout Goshen and northeast Laramie counties. These storms pelted crop with 1/2-inch diameter hail from Yoder south to Albin. Also, Yoder reported some heavy rain totaling over half am inch (.67).
Sauk Co.	Violent thunderstorm winds gusting to 65 mph fell two large trees 1 mile south of Lime Ridge. At Lake Redstone,	WYZ001	09 2200MST 0 0 0 0 Snow
	a pier and boat station were upended by the wind and 2 sailboats were lifted 50 feet into the air and put to rest in a clump of small trees, causing extensive damage.	Northwest Mountains	Snow started to fall at times above 10,500 feet in the northeast section of Yellowstone National Park. Most of the snow melted a deposited on the roadway, but it did make roads slippery on Beartooth Pass. No snow accumulations were reported.
Stoughton, Dane Co.	29 1755CST 0 0 4 0 Thunderstorm Wind Intense thunderstorm winds caused extensive damage to	WYZ015-016 Southern Mountains and Laramie	12 . 0630MST 0 0 0 0 Snow
LaValle,	an apartment complex in the Town of Dunkirk near Stoughton when a tree fell on the building.  29 1845CST 0 0 ? ? Thunderstorm	Mountains	Light snow was falling at the 8,640-foot level on Interstate 80 between Cheyenne and Laramie at 0630MST. Snow was also falling in the southern mountains. Above 9,500 feet in the southern mountains snow fell at 0630MST and continued until 0830MST.
Sauk Co.	Wind (52) A severe thunderstorm generated wind gusts to 60 mph at LaValle.	1	One-half inch of snow accumulated on the ground. By 1100MST all snow was melted.
Waukeka, Crawford Co.	29 1940CST 0 0 ? ? Thunderstorm Wind	Weston Co, Newcastle	
	Power lines and large trees were knocked down by severe thunderstorm winds in Waukeka.	Crook Co, Moorcroft Campbell County:	17 1753MST 0 0 ? ? Hail (1.00)
Mount Ida and	29 2000CST 0 0 ? ? Thunderstorm	14NE Recluse	17 1900MST 0 0 2 ? Hail (.75)
Mount Hope, Grant Co.	A severe thunderstorm with strong winds toppled trees and power lines in the Mount Ida and Mount Hope areas.	14NE Recluse	17 1915MST 0 0 0 Heavy rain
Lake Onalaska, La Crosse Co.	30 1610CST 0 0 0 0 Funnel Cloud A funnel cloud was spotted at Lake Onalaska.		Strong thunderstorms marched through Campbell, Crook and Weston counties. These thunderstorms pelted the area with one-half inch to one inch diameter hail. Heavy rain was also noted with the storms, with rainfall amounts varying from one-half an inch (.55) at Mootroft to one and one-half inches (1.55) 14 miles northeast of Recluse.
		Teton Co, Jackson	18 1045MST 0 0 0 0 Thunderstorm Wind (50) A thunderstorm moved over the Jackson Hole Airport and produced wind gusts to 58 miles an hour.
		Teton County: 8S Jackson	21 1300MST 0 0 ? ? Thunderstorm
		Jackson	Wind (52)   21 1310MST
		32N Jackson	21 1325MST 0 0 ? 0 Hail (1.25)
48 WYOMING		32N Jackson	21 1325MST 0 0 ? 0 Thunderstorm Wind (52)
Hot Spring County, 9N Thermopolis	05 2016MST 0 0 3 0 Thunderstorm Wind	Teton Village	21 1330MST 0 0 4 0 Ha11 (2.25)
Included to	A strong thunderstorm nine miles north of Thermopolis knocked	Teton Village	21 1330MST 0 0 4 0 Heavy rain
	over a shed and killed a colt on a ranch. Also, a window was blown out on a building on the ranch.	8S Jackson	21 1330MST 0 0 3 0 Lightning
Converse County,	06 1603MST 0 0 0 ? Hail (1.50)	Teton Wilderness 45NE Jackson	21 1350 to 24.3 2550 0 0 6 0 Tornado (F4) 1400MST
5W Douglas	At 1603MST a Converse County deputy sheriff observed one and a	Park Co, 45E Cody	21 1500MST 0 0 ? 0 Heavy rain
	half inch diameter hail falling from a severe thunderstorm 5 miles west of Douglas.		Some unusually severe thunderstorms swarmed over northwest Wyoning during the afternoon of July 21. One of the first indications of these severe thunderstorms was the 60 mile an hour wind gusts reported by a radio station in Jackson at

	NO. OF ESTIMATED! PERSONS DAMAGE	NO. OF ESTIMATED PERSONS DAMAGE
PLACE	THE PARTY OF PARTY OF STIMATED	TIME - LOCAL STANDARD STANDARD STANDARD WIDTH OF PATH (YARDS) CROPS THE SITE - LOCAL STANDARD WIDTH OF PATH (YARDS) CROPS CROP
WYOMIN	NG 49 ALASKA, Sout	thern
	1300MST. As these severe thunderstorms moved northeast additional	4 Morning 0 0 5 0 Flash Flood
	diameter were observed along with winds gusting above 30 miles an hour. Also, torrential rains were noted from Jackson northeast to Cody.  When these severe thunderstorms moved northeast of Jackson over the Teton Wilderness Area it spawned the highest elevation F4 tornado ever documented. The devastating winds from the tornado produced a massive blowdown of 15,000 acres of mostly mature lodgepole pines which ranged from 80 to 100 feet tail. The massive blowdown stretched slightly over 24 miles from 80x Creek	leavy rains over the northern portion of the Copper River Basin aused mudslides and washouts which closed the Richardson Highwhrough Isabel Pass from Paxson to Big Delta.
	Trailhead, 10 miles east-northeast of Moran Junction, on the south to beyond the Yellowstone River on the north and was about 1 to 2 miles wide, 2.5 miles at the widest. An eyewitness to the blowdown stated, "You could look up a hillside where there had been a dense forest and count the trees left standing."	
	Later, as these severe thunderstorms moved over the East Entrance of Yellowstone National Park, torrential rains produced mudshides think along highway for a few house. The Park Court blood for	
	highway to a denth of 2 feet.	21-23 1 0 5 5 Flash Floodin
Fremont County: ander	21 1530MST 0 0 ? D Thunderstorm	A low pressure system mainly in the upper flow moved slowly westward over the area, bringing heavy showers to Hawaii on the 21st, Qahu on the 22nd, and Kauai on the 23rd. Flash floc damage was mostly minor. One person drowned near Sacred Falls
innear	21 1605MST 0 0 ? 0 Thunderstorm Wind	on Oahu while picking mountain apples in a creek bed which rapidly filled up with water from rain that fell in the drains area above. Most of the heavy showers occurred during afterno
.*	Severe thunderstorms that arrected northwest wyoming during the	and early evening hours and were mainly restricted to windward slopes.
latrona County, ISN Casper	21 1650 to 5 175 0 0 0 0 Tornado (F2) 1700MST At 1650MST severe thunderstorms moved through Natrona County and spawned a tornado 25 miles northwest of the Natrona County Afrport, west of Casper. No damage reports were received.	NONE REPORTED
Sweetwater County, 20S Green River	21 1815MST 0 0 ? 0 Hail (.75)	
203 Green River	Severe thunderstorms moved through south Sweetwater County at about 1815MST. These thunderstorms deposited three-quarter of an inch diameter hail and heavy rain over the Flaming Gorge National Recreational Area.	NDS NONE REPORTED
Albany County, 8E Laramie	28 1430MST 0 0 3 0 Lightning	
	Heavy thunderstorms rumbled into the city of Laramie during the afternoon. Several lightning strikes were reported in the city with a few trees damaged by lightning.	NONE REPORTED
Natrona Co, Casper	28 1658MST	
	At 1658MST a strong thunderstorm moved over the Natrona County Airport west of Casper. This storm dumped over one inch (1.08) of rain in about 23 minutes. Eighth of an inch diameter hail was also reported with this storm.	
Campbell County: Savageton	30 2045MST 0 0 ? ? Hail (0.50),	
SS Gillette	Heavy rain	
35 Gillette	30 2130MST 0 0 4 0 Lightning 30 2140MST 0 0 ? ? Hail (0.50),	
Crook County, 7W Moorcroft	30 2140MST 0 0 ? ? Hail (0.50),  Heavy rain  A very strong thunderstorm developed near Savageton, about 40 miles southwest of Gillette, at 2045MST. This storm at Savageton drenched the town with one and a half inches (1.50) of rain in 35 minutes along with one-half inch diameter hail. The storm later moved mortheast during the next few hours and damaged structures in the south and east sections of Gillette. As the thunderstorm moved into Gillette, 50 to 60 mile an hour winds raked the area along with one and one half inches (1.50) of rain in 1 hour. This storm destroyed I unoccupied mobile home.	
•	Other damages included numerous horse stalls destroyed, sections of roofs partially destroyed and many city and state road signs severely damaged. Also, lightning struck a home in Gillette and knocked a hole in the ceiling. Many streets and a few apartments were flooded due to the torrential rains between 2100 and 2200MST. Later that night the very strong thunderstorm moved into Crook County with heavy rain and one-half inch diameter hail west of Moorcroft.	
<sup>.</sup> <sup>19</sup> ALASKA, No	orthern ———— NO REPORT RECEIVED	

### STORM SUMMARY

	l		T	,			ı	T			1	1		Τ	· · · ·	,	ı			r	r		T	1	J	ULY	198
ТҮРЕ	ALABAMA	ARIZONA	ARKANSAS	CALIFORNIA	COLORADO	CONNECTICUT	DELAWARE	FLORIDA	GEORGIA	ІВАНО	ILLINOIS	INDIANA	IOWA	KANSAS	KENTUCKY	LOUISIANA	MAINE	MARYLAND & DC	MASSACHUSETTS	MICHIGAN	MINNESOTA	MISSISSIPPI	MISSOURI	MONTANA	NEBRASKA	NEVADA	NEW HAMPSHIRE
TORNADOES																						APPA-					<del> </del>
Number Days Deaths Injuries Property Damage Crop Damage				1 0 0 ?	14 5 0 0 4 0			7 5 0 0 5 0	2 2 0 0 5 4	2 2 0 0 4 5	4 4 0 0 5 3	6 3 0 3 6 0	14 7 0 0 6 5	8 3 0 2 6 3	2 1 0 0 4 0	2 2 0 0 3 ?				12 6 0 3 4	13 9 0 0 7 6				5 3 0 0 6 4	1 0 0 0	
HAIL																											
Deaths Injuries Property Damage Crop Damage	0 0 ? 0	0 0 0 ?		0 0 ? ?	0 0 6 7	0 0 2 0			0 0 ? 5	0 0 3 5	0 0 7 5	0 0 ? ?	0 0 6 6	0 0 4 5	0 0 3 6		0 0 2 0	0 0 ? ?		0 0 2 o/c	0 0 ? 6	0 0 ? ?	0 0 4 ?	0 0 4	0 0 6 7		
THUNDERSTORM WINDS																											
Deaths Injuries Property Damage Crop Damage	0 1 5 ?	0 0 5 ?	0 0 5 0	0 0 ? ?	0 0 4 0	0 0 4 3	0 0 5 0	1 3 4 0	0 2 6 0	0 0 5 5	1 0 6 5	0 0 5 ?	0 0 6 5	0 32 6 4	0 12 6 3	2 9 5 ?	0 0 6 0	0 3 4 0	0 0 4 0	5 7 5 0	0 1 5 5	0 0 5 ?	0 0 6 0		0 0 6 5	0 0 3 0	0
HIGH WINDS																											
Deaths Injuries Property Damage Crop Damage			•								-															0 0 5 0	
LIGHTNING																										Ċ	
Deaths Injuries Property Damage Crop Damage		1 0 0 0	0 4 4 0	0 0 ? 0	2 4 4 0	0 1 ?		3 5 5 0	2 10 5 0		0 31 6 0	0 1 5 0	0 2 5 0	0 2 5 0	1 9 5 0	0 0 6 0	0 0 6 0		0 3 5 0	0 13 5 0	3 1 5 0	1 2 4 0	1 0 0			0 1 0	0 0 6 0
FLASH FLOODS	ĺ																										
Deaths Injuries Property Damage Crop Damage	2 0 ? ?		0 0 4 0	0 0 ? 0						0 0 5 4	0 0 4 ?	2 1 ?	0 0 6 6	0 0 5 4	0 0 5 3	0 0 ? 0				0 0 6 0	2 2 7 0		0 0 4 4	0 0 4 0/c	0 0 4 5		
FLOODS																						Ì		-, -			
Deaths Injuries Property Damage Crop Damage													0 0 6 5											0 0 6 6			
HEAVY SNOWSTORMS AND BLIZZARDS @			į									Ì															
Deaths Injuries Property Damage Crop Damage													`														
ICE STORMS #																		ļ						Ì	Ì		
Deaths Injuries Property Damage Crop Damage																											
HURRICANES AND TROPICAL STORMS																						1			ļ		
Deaths Injuries Property Damage Crop Damage																											
ALL OTHERS																											
Deaths Injuries Property Damage Crop Damage			4 0 0 0				0 0 4 4		4 0 0 ?		6 0 0 6		4 0 0 0		0 10 6 0			0 0 5 4				0 5 0 0			1 0 0 0		

# STORM SUMMARY

			T	4							∢															ULY	₩ W
TYŖE	NEW JERSEY	NEW MEXICO	NEW YORK	NORTH CAROLINA	<b>МОВТН DAKOTA</b>	оню	OKLAHOMA	OREGON	PENNSYLVANIA	RHODE ISLAND	SOUTH CAROLINA	SOUTH DAKOTA	TENNESSEE	TEXAS	ОТАН	VERMONT	VIRGINIA	WASHINGTON	WEST VIRGINIA	WISCONSIN	WYOMING	ALASKA	HAWAII	PACIFIC	PUERTO RICO	VIRGIN ISLANDS	NATIONAL DEAT
TORNADOES																						<del>-</del> <del> </del>		0	0	0	
Number Days Deaths Injuries Property Damage Crop Damage	8 4 0 3 5 ?	1 1 0 0 5	4 3 0 1 6 4		12 1 0 0 6 ?	3 2 0 0 5 0	1 1 0 0 ?					19 5 0 0 4 3		11 5 0 12 6 ?			3 0 0 6 3			7 6 0 6 ?	2 1 0 0 6 0						2
HAIL Deaths Injuries Property Damage Crop Damage	0 0 ? ?	0 0 0 5	0 2 5 7	0 0 5 6	0 0 7 7	0 0 4 ?	0 0 5 ?	0 0 ? 5	0 0 6 ?		0 0 5 5	0 0 5 5	0 0 0 4	0 0 5 7	0 0 6 6	0 0 4 4	0 0 7 4	0 0 0 ?	0 0 ? ?	0 0 5 4	0 0 4 3						
THUNDERSTORM WINDS	ļ									,																	
Deaths Injuries Property Damage Crop Damage	0 0 4 ?	0 0 4 ?	0 2 6 4	0 0 5 6	0 0 7 ?	0 0 6 0	0 1 5 ?		0 1 5 ?	0 0 3 0	0 6 6 3	0 2 6 4	0 3 5 4	3 0 6 3		0 0 6 4	0 0 5 0	!	0 0 5 ?	0 47 6 ?	0 0 6 ?						1
HIGH WINDS  Deaths Injuries Property Damage Crop Damage															1 2 1 0				-								
LIGHTNING  Deaths	1		2	,	1	0	0	0	,	0	,	,	,														
Injuries Property Damage Crop Damage	0		3 7 7 2	2 1 5 0	0	0 7 0 0	0 1 5 ?	0 6 ?	1 6 5 0	0 3 0	1 1 6 0	1 0 5	4 2 5 0			0 0 5 0	0 5 4	0 0 4 0		0 0 5	0040						1
FLASH FLOODS							i						•														
Deaths Injuries Property Damage Crop Damage	0 0 4 0	0 1 ? 0	0 0 6 2			0 5 7 7	0 0 ? ?		0 0 6 0	:		j	٠	11 33 6 ?	0 0 4 0	0 0 5 0	0 0 6 3	0 0 5 0	0 0 ? ?				1 0 5 5				
FLOODS									i	İ													i				
Deaths Injuries Property Damage Crop Damage						0 0 6 6																					
HEAVY SNOWSTORMS AND BLIZZARDS @																											
Deaths Injuries Property Damage Crop Damage																											
ICE STORMS #  Deaths Injuries Property Damage Crop Damage																											
HURRICANES AND TROPICAL STORMS																											
Deaths Injuries Property Damage Crop Damage																											
ALL OTHERS																											
Deaths Injuries Property Damage Crop Damage			0 4 3 0	0 ? 6 ?			1 0 0 0		51 0 0 ?		1 0 0 0					0 0 4 0	0 0 4 5										19

# LATE REPORTS

A severe thunderstorm produced winds that took down trees.

27 NEW HAMPSHIRE MAY\_ 1987

Rockingham Co.; Newmarket, Portsmouth, Newton, Kingston, Exeter, and Seabrook

# CORRECTIONS

		CAL	PATH	Ē		OF SONS		ATED!				CAL	PATH	Ŧ		OF RSONS	ESTIM DAM	ATED!	]
PLACE	DATE	TIME - LOCAL STANDARD	LENGTH OF !	WIDTH OF PATH (YARDS)	KILLED	NJURED	PROPERTY	CROPS	CHARACTER OF STORM	PLACE	DATE	TIME - LOCAL STANDARD	LENGTH OF F	WIDTH OF PATH (YARDS)	KILLED	INJURED	PROPERTY	CROPS	CHARACTER OF STORM
17 MAINE				***						28 NEW JERSE	Y, S	outhern	)						
MAY 1987										JUNE 1987									
Penobscot Co., Bangor	01	1030EST			0	0	4	0	High Wind	TIME CHANGE:	Time show		follow	ving en	tries	from	page 9	i2 are	corrected as
·	St tr ar	ation pers apping two	onnel men i Griff	took dow nside a in Road	wn fi car and	ve ut for al Kendus	ility bout 3 skeag :	poles : O minu	Flight Service on outer Broadway, tes. Power to the , including Birch	Burlington County 2 NW Mount Holly 3 E Browns Mills	13 Gol	1815EST 1835EST fball si	r Lze ha	il fel	0 0 1 ne	0 0	? ? ount	? Holly	Hail (1.75) Hail (0.75) (West Hampton
York Co., Eliot	Se fa we	ilures. R re blocked use causin	iver, by tri g \$10,	Tidy, Bo ees and 000 dama	fall	Houde en pov	e, Wor ver li	trees ster;	TSTM Wind  and caused power and Goodwin roads One tree fell on a on a truck doing	Ocean County: Beach Haven Lakewood 5 N Toms River 3 W Toms River	13 13 13 13	2020EST 2050EST 2100EST 2100EST	e e e		0 0 0	0 0 0	? 3 3 3	0 0 0	TSTM Wind (60) TSTM Wind TSTM Wind TSTM Wind
Cumberland Co.; Casco. N. Raymond, and Gray	31 A	1530 to 1545EST severe thu	nderst		0 duced	0 winds	3 s <b>th</b> at	•	TSTM Wind		kno	ts at th	ne Bea	ch Hav	en Cought	Coast dow	Guar n pow	d Sta er li	50 to 60 stion. nes in Lakewood d Toms River.
York Co., Limington	1.	1545EST			0	0	2	0	TSTM Wind										
		severe thu MPH.	nderst	orm prod	duced	winds	that	guste	d to more than	] }									
Cumberland Co., Standish and	31	1545 to 1600EST			0	0	3	0	TSTM Wind	36 PENNSYLVA	NIA	, Easte	ern						
Windham	A	severe thu	nderst	orm prod	duced	winds	that	took (	down trees.	<u>JUNE 1987</u>									
York Co., Buxton	31	1600EST			0	0	2	0	TSTM Wind	TIME CHANGE:	Time		follo	ving en	tries	from	page (	iO are	corrected as
Cumberland Co.,	M.P.	1600 to 1615EST			0	0	3	0	d to more than 60  TSTM Wind  down trees.	Centre County: Pleasant Gap Aaronsburg	8 Thu	1835ES3 1835ES3 understor	r rm wir	nds do	0 0 wned	0 0 tree	3 3 s in	0	TSTM Wind TSTM Wind sant Gap and

# LATE REPORTS

STORM SUMMARY

4	l l l l l l l l l l l l l l l l l l l	
Carroll Co.,	29 2310EST	
Wolfeboro		MAY 1987
	Lightning struck the cupola of the 115-year-old historic Wolfeboro	(MI 1707)
	Railroad Station, setting the attic on fire. The fire was quickly	Page 66: MAINE - Thunderstorm Winds - Property Damage = 5
1	extinguished but damage to the roof and some office space was	- High Winds - Property Damage = 4
l	extensive.	- High winds - Hoperty Samuel
1		Page 66: NEW HAMPSHIRE - Thunderstorm Winds - Property Damage = 5
Belknap Co.,	31 1434 to 0 0 3 0 TSTM Wind	- Lightning - Property Damage = 5
Gilmanton	1445FST	- Eighthing - Floperty banage 5
1		
1	Severe thunderstorm winds took down trees and power lines, dis-	
1	rupting electrical service to about 1100 people.	
1		
Strafford Co.;	31 1445 to 0 0 5 0 TSTM Wind	CORRECTIONS
Rochester,	1500EST	CORRECTIONS
Gonic	1000E31	
Dover, and	Severe thunderstorm winds knocked down several trees, disrupting	
Durham	power in the Dover Points section of Dover, took down power trans-	
1.	mission lines in Durham, took down trees and damaged a roof at the l	

١	Severe thunderstorm winds took down trees and power lines, dis- rupting electrical service to about 1100 people.	
	31 1445 to 0 0 5 0 TSTM Wind 1500EST	CORRECTIONS
	Severe thunderstorm winds knocked down several trees, disrupting power in the Dover Points section of Dover, took down power transmission lines in Durham, took down trees and damaged a roof at the Country Club in Rochester, and devastated a section of the Paradise Home Park in Gonic. In the mobile home park, the roof was ripped off one mobile home and several 60-foot pine trees fell across other mobile homes.  31 1500 to 0 0 4 0 Lightning 1515EST	MAY 1987  Page 66: MASSACHUSETTS - Lightning - Deaths = 0 (vice 1)  Page 67: National Death & Injury Totals - Lightning - Deaths = 15 (vice 16)
	Thunderstorms moving through the area produced lightning that struck transformers and 45 MPH winds that caused small limbs to fall on power lines, disrupting electrical service to about 10000 people.	JUNE 1987 Page 78: TEXAS - Tornadoes - Number = 21 (vice 19)

### REFERENCE NOTES

### STORM DAMAGE CATAGORIES

2 3 4 5 6 7 8	Less than \$50 \$50 to \$500 \$500 to \$5,000 \$5,000 to \$50,000 \$50,000 to \$500,000 \$500,000 to \$5 Million \$5 Million to \$50 Million \$50 Million to \$500 Million \$500 Million to \$5 Billion	0/Blank * ** @ # # * p/c	None reported. Miles instead of yards. Yards instead of miles. Includes heavy sleet storm. Freezing drizzle and freezing rain, commonly known as glaze. Report incomplete. Report not received. Indicates Crop Damage amount is included in the value given for
			property damage.

When reports are not received or are incomplete, the Storm Summary National Death and Injury totals may also be incomplete.

# Definition of Fujita Tornado Scale (F scale)

(FO) Gale tornado (40-72 mph): Light damage Some damage to chimneys; break branches off trees; push over shallow-rooted trees; damage sign boards.

(F1) Moderate tornado (73-112 mph): Moderate damage The lower limit (73 mph) is the beginning of hurricane wind speed; peel surface off roofs; mobile homes pushed off foundations or overturned; moving autos pushed off the roads.

(F2) Significant tornado (113-157 mph): Considerable damage Roofs torn off frame houses; mobile homes demolished; boxcars pushed over; large trees snapped or uprooted; light-object missiles generated.

(F3) Severe tornado (158-206 mph): Severe damage Roofs and some walls torn off well-constructed houses; trains overturned; most trees in forest uprooted; heavy cars lifted off ground and thrown.

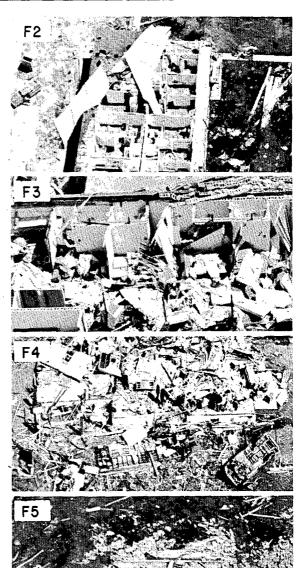
(F4) Devastating tornado (207-260 mph): Devastating damage Well-constructed houses leveled; structure with weak foundation blown off some distance; cars thrown and large missiles generated.

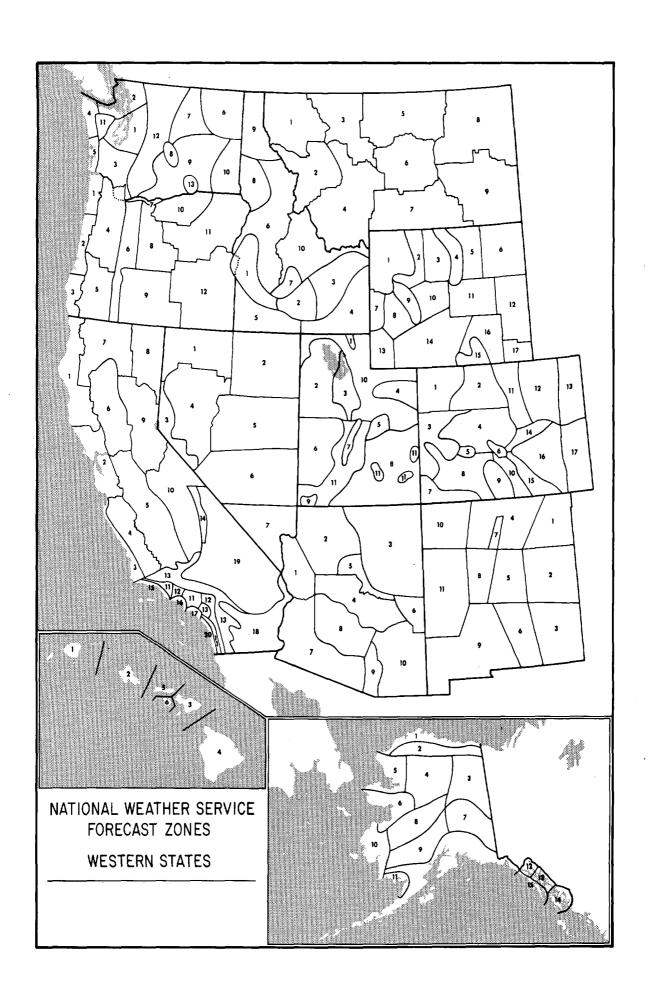
(F5) Incredible tornado (261-318 mph): Incredible damage Strong frame houses lifted off foundations and carried considerable distance to disintegrate; automobile-sized missiles fly through the air in excess of 100 m; trees debarked; incredible phenomena will occur.

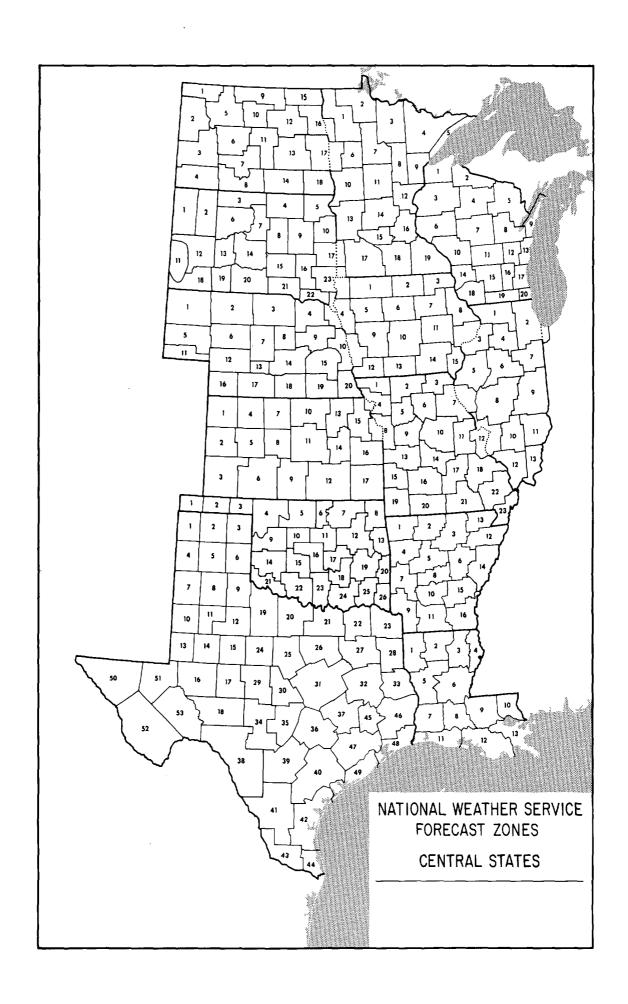
(F6-F12) (319 mph to Mach 1, the speed of sound): The maximum wind speeds of tornadoes are not expected to reach the F6 wind speeds.

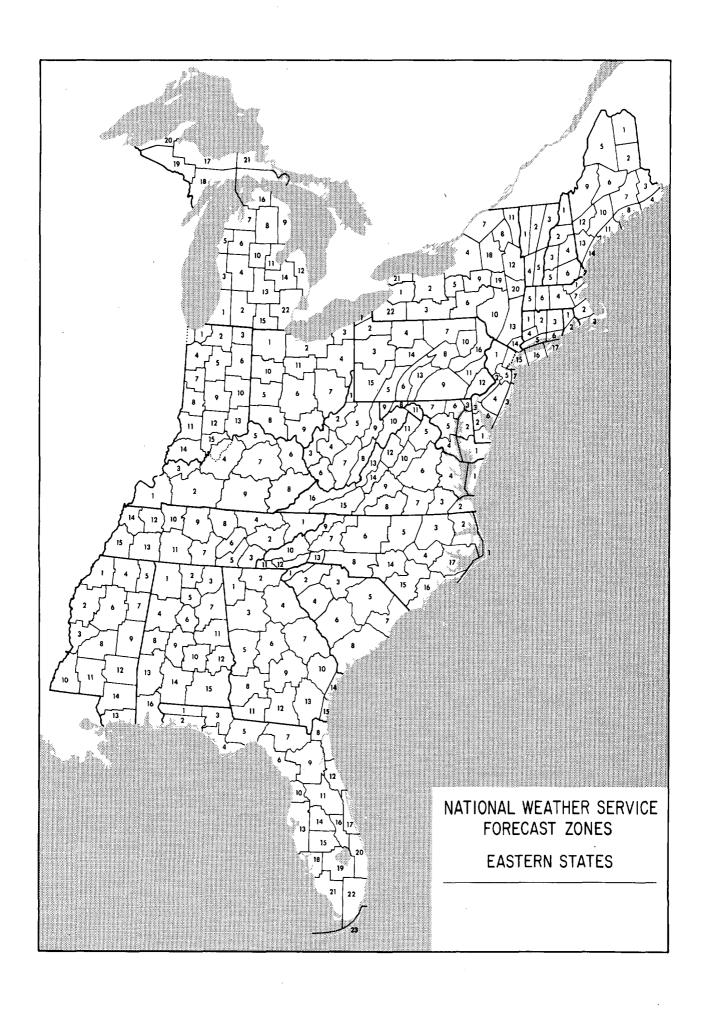
(F0+F1) Weak Tornado (F2+F3) Strong Tornado (F4+F5) Violent Tornado

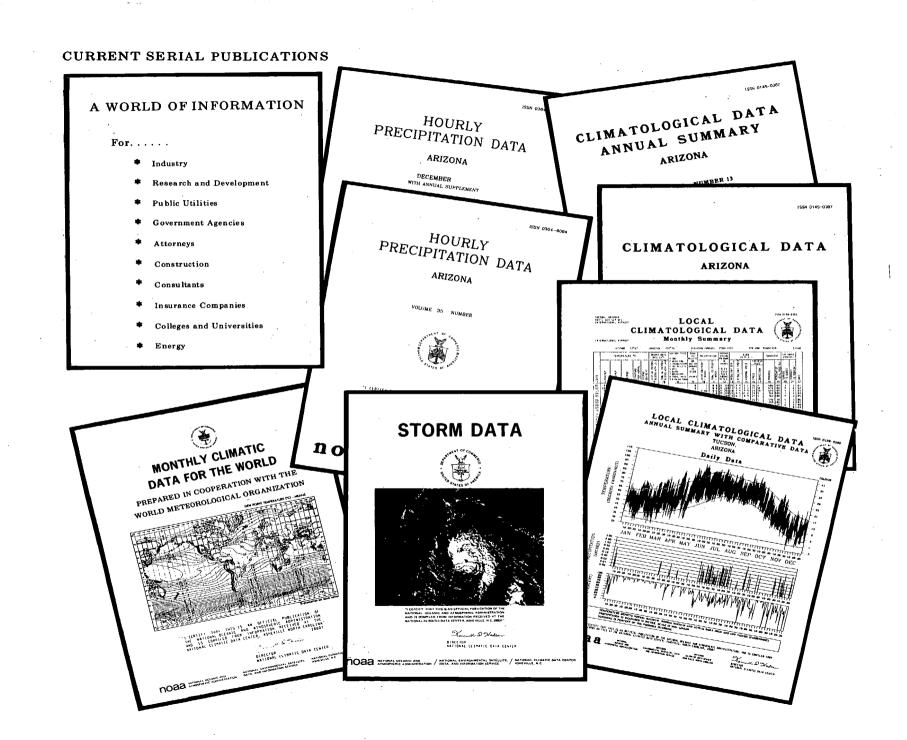
From J. Atmos. Sci., August 1981, p. 1517-1519













### Conference Director

Leslie A. Bond Suite 1 221 East Camelback Road Phoenix, AZ 85012 (602) 831-0192

### Program Chair

William L. Trakimas Division of Water 2475 Directors Row Indianapolis, IN 46241 (317) 232-4178

### **Exhibits Chair**

Sue Josheff Natural Resources Post Office Box 7921 Madision, WI 53707 (608) 266-2709 The Association of State Floodplain Managers (ASFPM) is a national organization, and its goal is the reduction of flood hazards through sound floodplain management. Its members include representatives of local, State, and Federal government as well as those of the private and nonprofit communities. The Association sponsors an annual conference on the state-of-the-art in flood hazard reduction. Conference topics always span a broad spectrum of issues of interest to those involved in floodplain management.

The Federal Interagency Floodplain Management Task Force has commissioned a study of the status and effectiveness of the Nation's floodplain management activity to fulfill recommendations set forth in the document "A Unified National Program for Floodplain Management." Special emphasis is to be placed on the floodplain management tools contained in this document. A status report is now being prepared. The Task Force has requested the assistance of the ASFPM in the second part of the study—an evaluation of the effectiveness of floodplain management measures—and the ASFPM has agreed to devote a portion of its 1988 conference to this effort.

The following specific topics are presented to enhance the discussion and evaluation of the effectiveness of floodplain management efforts during the Association's 1988 conference.

- · Efforts in analysis and management of special problem areas, e.g., alluvial fans, shifting streambeds, etc.
- Multiobjectives planning processes for the management of floodplains
- Effectiveness of floodplain management tools, whether individually or in tandem
- · How the full range of benefits from nonstructural measures can be better identified and quantified
- How nonstructural measures can be made more attractive to local governments
- Examples of wise or beneficial uses of the floodplain
- Solving specific floodplain management problems through a combination of selective tools and strategies
- How we can increase the public official and individual decisionmaker's awareness of flood hazard areas and the understanding of flood risk

### **About the Conference**

The technical conference will run Tuesday through Thursday, including a field trip in the Nashville area. The conference will revolve around the idea of floodplain partners working in harmony as we evaluate the status of the Nation's floodplain management activity. Attendees will be encouraged to share their views as we try to "tune the future" in floodplain management. The ASFPM will conduct its committee and general membership meetings on Monday. All members and prospective members are invited and encouraged to participate. Wednesday afternoon is set aside for an interesting field trip culminating in a "catfish fry" that evening. Optional field trips and spouse activities are also being planned.

The conference will be staged at the beautiful Vanderbilt Plaza Hotel located on the west side of Nashville, across from Vanderbilt University. Conference room rates are \$65 single and \$79 double. Printers Alley. Music Row, Centennial Park, and Vanderbilt University are within easy walking distance of the hotel.

### **Registration Rates**

Registration prior to April 2, 1988, will be \$150 for members, \$165 for nonmembers, and \$65 for students and local government officials from the State of Tennessee.

### **Exhibit Space**

Exhibit space will be made available for a fee to individuals or organizations who wish to display a product or service to attendees. Information on exhibit space can be acquired from Sue Josheff, Exhibits Chair.

### About Nashville

There is no better place to promote "floodplain harmony" than in Music City, USA. Located in the heart of Tennessee along the Cumberland River, Nashville's heart beats to music! May in Nashville provides visitors with pleasant temperatures, and the air is filled with the sounds of country. Within a short distance of the hotel is Opryland USA and the Grand Ole Opry—attractions you do not want to miss. Music brings you to Nashville, but it's the warmth and friendliness of the people you remember. Nashville loves company, come and see in 1988!



COMPUTATIONAL HYDROLOGY INSTITUTE





18021-J Sky Park Blvd., Suite 524 Irvine, CA 92714

# **COMPUTATIONAL HYDROLOGY 88**

Second International Symposium on Computational Methods In Flood Control Hydrology & Hydraulics, Surface & Subsurface Hydrology, and Water Resources Engineering

> San Diego, California July 10 - 13, 1988

Chief among the concerns of environmental impacts are the effects of storm runoff on existing and urbanized watersheds. Such concerns as stormwater management, surface runoff pollution, and methods for hydraulic and hydrologic modeling are only a few of the many problems faced by today's private engineering concerns and public agencies. This international conference, COMPUTATIONAL HYDROLOGY 88, aims at providing a forum for presenting the latest innovative and applied computational methods in flood control hydrology and hydraulics, surface and subsurface hydrology, and water resources engineering.

# Objectives \_

The major objective of COMPUTATIONAL HYDROLOGY 88 is the creation of a proper forum of discussion among managers, scientists, and engineers involved in the creation, development of application of computer software to hydrologic problems. COMPUTATIONAL HYDROLOGY 88 will present the most recent developments and practical implementations in the theoretical, numerical and applicable aspects of computer analysis, simulation modeling, control and forecasting for hydrologic applications. The conference aims at the establishment of a useful connection between originators of hydrologic software programs and their possible users, thus reducing the present large duplication of effort in software development.

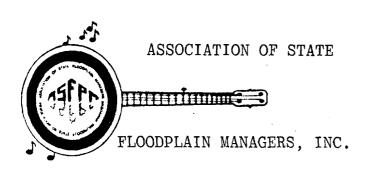
### Conference Chairmen \_\_\_

T.V. Hromadka, Ph.D., Ph.D., P.E. California State University, Fullerton Department of Mathematics Fullerton, CA 92634

J.J. DeVries, Ph.D., P.E. Associate Director, Water Resources Center University of California, Davis

R.H. McCuen, Ph.D., P.E. University of Maryland Department of Civil Engineering College Park, MD 20742

H.H. Chang, Ph.D., P.E. Department of Civil Engineering San Diego State University, CA



COMPUTATIONAL HYDROLOGY INSTITUTE

TWELFTH ANNUAL CONFERENCE

Hosted by the

Tennessee Valley Authority

CHI



VANDERBILT PLAZA HOTEL

NASHVILLE, TENNESSEE

MAY 16-19, 1988

# **COMPUTATIONAL HYDROLOGY 88**

Second International Symposium on Computational Methods In Flood Control Hydrology & Hydraulics, Surface & Subsurface Hydrology, and Water Resources Engineering

SAN DIEGO, CALIFORNIA

JULY 10-13, 1988

DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL ENVIRONMENTAL SATELLITE, DATA, AND INFORMATION SERVICE
NATIONAL CLIMATIC DATA CENTER
FEDERAL BUILDING
ASHEVILLE, N.C. 28801

BULK RATE
POSTAGE & FEES PAID
United States Department Of Commerce
NOAA Permit No. G - 19